

Prix de l'abonnement :--The Chemist and Druggist une fois par semaine, et l'agenda du Chemist and Druggist une fois par an, 12.50 francs par an, franco.

Abonnementspreis: _The Chemist and Druggist einmal wöchentlich, und Notizkalender des Chemist and Druggist einmal im Jahre, 10 Mark jährlich, frei in's Haus gelietert.

Precio de suscricion:—The Chemist and Druggist, una vez por semana, y el Agenda del Chemist and Druggist una vez al año, 12.50 pesetas anuales, franco.

No. 481. Vol. XXXV.

JULY 6, 1889.

Subscription, 10s. Per Annum, Including Diary, Post Free the World over. Single Copies, 4d. Each, Post Free.

ANTISEPTIC.

THE

SOLUBLE.

FOR TOILET and NURSERY USE.

JAMES WOOLLEY, SONS & CO. Pharmaceutical Chemists, MANCHESTER.

(REGISTERED)

MEAT AND NOURISHING

Strongly recommended by the Medical Faculty in all cases of weakened constitution, and particularly useful in cases of ladies, whilst nursing, and delicate children, or in ailments where a stimulating—digestive—tonic—nutrient is indicated Dose—A quarter to Two Ounces twice daily.

In Bottles, 2s. 6d., 5s., and 7s. 6d.

HOOPER COMPANY.

CHEMISTS, ETC.

55 Grosvenor Street, and 26 Davies Street, W.; also at 7 Pall Mall East, London. LABORATORY-MITCHAM, SURREY.

ALSO, AS SUPPLIED TO H.M. THE QUEEN AND THE ÉLITE OF THE ARISTOCRACY,

Six dozen Carriage free. 2/6 per dozen.

PURE SODA, PURE POTASH, LEMONADE, AND AROMATIC GINGER ALE. Special Terms for Quantity.

Exchange Column, p. 12. Advertisers' and Buyers' Reference List and Index to Advertisements, pp. 25-27-

MAY & BAKER

(W. G. BAKER, R. C. HEATH, T. TYRER, W. E. B. BLENKINSOP),

Manufacturing Chemists,

BATTERSEA, LONDON, S.W.

MEDALS, 1851, 1855, 1862, 1867, 1885, 1887, 1888.

MAKERS OF

PURE MINERAL ACIDS.

BENZOIC ACID AND ALL BENZOATES.

(PURE)

ETHERS

For ANÆSTHETICS, PHOTOGRAPHY, and ICE MAKING

BISMUTH PREPARATIONS,

SOLUTION OF AMMONIO-CITRATE OF BISMUTH. P.B.

CORROSIVE SUBLIMATE,

PURE CALOMEL. AND EVERY MERCURIAL PREPARATION.

CONCENTRATED FRUIT ESSENCES AND FLAVOURS,

PHENACETIN,
The New Anti-Pyretic and Anti-Neuralgic.

SULFONAL.

The New Hypnotic.

FOR GOLD AND SILVER PLATING AND PHOTOGRAPHY.

LIQUID AMMONIA, '880.

IN BELLS OR TABLETS, BY A NEW PATENT PROCESS.

MAY & BAKER'S Manufactures may be ordered through any Wholesale House.

TO AFFIX OUTSIDE PERMANENTLY.

MESSRS. ELLIMAN, SONS & CO., SLOUGH, ENGLAND,

ARE NOW ISSUING, FREE TO ANY ADDRESS,

(Foreign and Colonial Dealers to give an Address in England for enclosure)

ENAMELLED IRON TABLETS,

Size 20 inches by 18 inches, with their registered (in all countries) Trade Mark upon them, to Chemists who will undertake to affix them permanently in a conspicuous position outside their premises.

ALSO

A HANDSOME

SHOW CARD

FOR INSIDE EXHIBITION NOW READY.

SIZES-

24 × 17

OR

17 × 12.

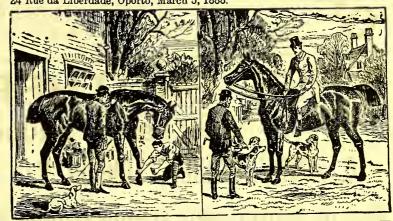
PLEASE STATE WHICH.

ELLIMAN'S ROYAL EMBROCATION.

"I have had over twenty-five years' experience as job-master in this city of Oporto, Portugal, and can safely declare I never, during my experience, used such a perfect remedy, and shall recommend it to everyone I know it would be useful to.

"GEORGE HENRY CORKER.

24 Rue da Liberdade, Oporto, March 5, 1888."



READ.

"I find they greatly assist the sale of the Embrocation."

J. A. JORDAN, 44 Low Hill, Liverpool, Sept. 4th, 1888.

CLIMBED WESTERHAM HILL AND WON THE RACE

"Whilst trying Westerham Hill last Thursday, previous to the competition which took place on the following Saturday I severely sprained the muscles of my right leg, and thought at the time it would be quite out of the question to get right again in time for the competition. However, I was advised by a fellow cyclist to try Elliman's Embrocation, which I did, freely, using half a bottle in a bath and rubbing in the remainder with my hand, with such success that I was able to ride the next day and win the day after.

"W. CHATER LEA, North Road Cycling Club, August 22nd, 1888."

ELLIMAN'S ROYAL EMBROCATION, in Bottles, 2s., 2s. 6d., and 3s. 6d. each. ELLIMAN'S UNIVERSAL EMBROCATION, in Bottles, 1s. 1½d. and 2s. 9d. each.

OBSERVE

The Sale of these Preparations is increasing rapidly in all parts of the world, to a very great extent through persons recommending them to others. No tricky advertisements issued, nor are Press Notices accepted offered to secure an order for advertising.

Prepared only by ELLIMAN, SONS & CO., Slough, England.

TRADE MARK

NOTICE.

We propose to sell "PETROLATUM" as low, or, if necessary, lower than any of the imitations of our goods, improperly represented as being equal to or cheaper than "VASELINE."

"PETROLATUM" is not equal to, or intended as a substitute for, our Mark "VASELINE," but is far superior to any other Petroleum Jelly.

Of all Wholesale Houses. In 5-lb. and 50-lb. Tins, and Casks of about 3 cwt. each.

CHESEBROUGH MANUFACTURING CO., 42 Holborn Viaduct, LONDON, E.C.

. DR. WARLOMONT'S ANIMAL VACCINE.

PATENT No. 4623. 28 SEPT. 1882.

From information which has been conveyed to him, Dr. Warlomont has reason to believe that Animal Vaccine prepared on the Continent in accordance with the invention the subject of this patent is being imported into this country. CHEMISTS and DRUGGISTS—whether Wholesale or Retail—and the MEDICAL PROFESSION generally, are respectfully informed that any importation, sale, or use of such Vaccine would constitute an infringement of Dr. Warlomont's patent rights. The only guarantee of Dr. Warlomont's Vaccine is the Label and Trade Mark of the Association for the supply of Pure Vaccine.

12 PALL MALL EAST, LONDON, S.W.

BAISS BROTHERS & CO.

WHOLESALE DRUGGISTS,

16 JEWRY STREET, LONDON, E.C., AND MANCHESTER,

Beg to inform their friends that owing to the unfortunate Fire which occurred at their London Premises, No. 4 Jewry Street, E.C., early on the morning of July 4th, their Office for the time being will be at 16 JEWRY STREET, to which all communications should be addressed. In addition to these premises BAISS BROS. & CO. have secured spacious Warehouses at No. 36 COMMERCIAL STREET, E., and they are glad to state that NO INTERRUPTION TO THE ORDINARY BUSINESS will occur.

Telegraphic address-"BAISS BROTHERS."

Fletchers' Concentrated Siquors

For the Extemporaneous Production of TINCTURES, INFUSIONS AND SYRUPS.



TWELVE GOOD REASONS

WHY THEY SHOULD BE ADOPTED BY EVERY PHARMACIST.

- I.—Because, being manufactured by intelligent processes which are the practical outcome of the most recent scientific research, they represent the various constituents in the highest possible condition of excellence.
- 2.—Because, being carefully standardized in our own Laboratory, they may be relied on as definite in composition and constant in strength.
- 3.—Because they yield products which are always bright and handsome in appearance, and which do credit to the dispenser.
- 4.—Because they will keep fresh and good for almost any length of time, and therefore do not deteriorate in value.
- 5.—Because they occupy far less bulk than the old-fashioned "Concentrated Infusions," &c., and thus effect an important saving in carriage and storage, besides being more convenient to handle. Foreign buyers will attach special importance to these advantages.
- 6.—Because, in many instances, they obviate the necessity of stocking three or more preparations of the same drug.
- 7.—Because it will be found on comparison that our Concentrated Liquors are much more economical than weak preparations of the same drugs made by the antiquated, clumsy, and wasteful processes too frequently adopted.
- 8.—Because The Chemist and Druggist says, "They have higher claims than that of mere convenience; their potency is unquestionable, and they provide the element of constancy where that can generally not be ascertained, or even obtained, by the ordinary methods."
- 9.—Because The British Medical Journal reports that "Tinctures, made from them, and similar preparations made exactly according to the B.P. methods are practically identical in character."
- The Lancet describes them as "valuable and most serviceable, their purity and strength being unquestionable."
- THE MEDICAL PRESS AND CIRCULAR pronounces them "a very distinct advance in pharmacy, incomparably superior to the one-to-seven infusions, equal both in flavour and in medicinal properties to the best preparations that could be prepared from fresh drugs."
- THE PRACTITIONER, having "subjected them to a prolonged test, is able to report that, when diluted according to the directions given, the resulting Tinctures are indistinguishable for strength, appearance, and efficacy from the official preparations."

Fletcher, Fletcher & Stevenson, Manufacturing Chemists,

TELEPHONE No. 7525,

Holloway, London, N.

TELEGRAMS: "IODINE, LONDON."

May be had on application, enclosing Business Card.

MAW, SUN & THOMPSON'S



OF ILLUSTRATIONS

SURGEONS' INSTRUMENTS & APPLIANCES

INSTRUMENTS, &c., FOR VETERINARY PURPOSES.

DRUGGISTS' APPARATUS, IMPLEMENTS, UTENSILS,

And other Requisites employed in Pharmacy and the Dispensing of Medicines.

MEDICAL GLASS AND EARTHENWARE. SHOP FITTINGS, SHOW CASES.

LINT AND SPREAD PLASTERS. HAIR, TOOTH, AND NAIL BRUSHES. SPECIE JARS, SHOW BOTTLES. TOILET AND SMELLING BOTTLES.

FEEDING BOTTLES.

Proprietary Articles, Perfumery, and

DRUGGISTS' SUNDRIES OF ALL KINDS

MANUFACTURED AND SOLD BY

ALDERSGATE LONDON S. MAW, SON & THOMPSON,

FORWARDED POST FREE TO ALL PARTS OF THE WORLD.

Chemists and Druggists not receiving the above who are desirous of doing so are requested to make application enclosing Business Card, on receipt of which their names will be placed on the Register for all future issues.

JAHNCKE'S

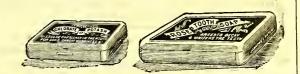
BOXES A **SPECIALITIES**

Patent Oblong Boxes

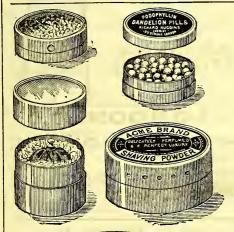
VARIOUS SIZES,

For Pills, Cachous, Soaps, Pellets of Compressed Drugs, Lozenges of all kinds, &c.

These Boxes are specially suitable for pocket use, being free from all sharp or pointed corners and projections, and are supplied, when required, with labels on lids bearing special inscriptions printed in gold, in lots down to 5 gross at a time.





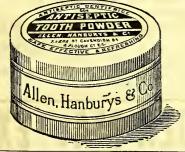


PATENT ROUND BOXES

(Sizes ranging from 4/5ths of a drachm to 8 oz. holding capacity).

For Powder, Ointments, Pastes, Creams, Salves, Jellies, Pills, Cachous, Lozenges, Fuller's Earth, &c., &c.

PARTICULARLY RECOMMENDED for triturated and viscous articles, as, owing to their special construction, the lid combines closeness of fit and perfect ease in being put on and taken off, with absolute security against the risk of coming off accidentally.



Supplied also with Transparent Glass Lids or Bodies.

Attention is called to the additional new feature of perforations in the sides of the boxes, whereby their contents can be shaken out by simply turning the lid, which works in a groove, and opens and closes the perforations as required.

SPECIALITIES.

Camphor Boxes and Camphor Lockets (filled with best English Refined Camphor); Shaving Cases; Bottle Cases, in great variety (for medical and other purposes); Toilet Soaps, Soap Wafers, &c.

MEDICAL SPECIALITIES.—Pocket Urine Test Case (fitted for Dr. George Johnson's and Dr. Pavy's tests), Pocket Hypodermic Syringe Case (designed by Dr. Talfourd Jones).

WHOLESALE AND RETAIL OF DRUGGISTS' SUNDRIESMEN THROUGHOUT THE KINGDOM.

WHOLESALE ONLY OF THE PATENTEE AND SOLE MANUFACTURER-

ERNST JAHNCKE, Works,

Works, Dorset St., Essex Rd., LONDON, N.

(DICK) VETERINARY COLLEGE, 8 Clyde Street, Edinburgh.

Trustees. - The LORD PROVOST, MAGISTRATES, and TOWN COUNCIL of the CITY of EDINBURGH.

The 67th SESSION BEGINS 1st OCTOBER, 1889.

The Trustees beg to intimate that the College Buildings have been entirely reconstructed, so as to provide ample accommodation for the instruction of 250 Students. The Class-rooms, Museums, Dissecting and Bone Rooms, Chemical and Physiological Laboratories, Reading-rooms, Gymnasium, Pharmacy, Stables, Kennels, &c., are unsurpassed in their completeness, and present opportunities for the study of Veterinary Science such as have not hitherto been available for Veterinary Students.

For full particulars apply to PRINCIPAL WALLEY.

"A Standard Work of Reference for Pharmacists."
Just issued, enlarged and re-written, 650 pages, 5th edition, 10s. 6d.

PHARMACY, MATERIA MEDICA AND THERAPEUTICS.

Is a complete commentary on the B.P., and contains sections npon more than 300 non-official remedies, including every new and recent remedial agent of importance up till present date; also sections upon the Science of Compounding, Dispensing, and Prescribing Remedies, with Original Autograph Recipes in Latin, French, and German; Latin Grammar and Glossary, B.P.C. Formulæ, &c., &c.

By W. WHITLA, M.D. Examiner in Botany and Materia Medica, Pharmaceutical Society I., and University of Glasgow, &c., &c.

LONDON: HENRY RENSHAW, 356 STRAND.

THE LONDON HOMEOPATHIC HOSPITAL AND MEDICAL SCHOOL,

GREAT ORMOND STREET.

A NEW WARD, nnoccupied for want of funds, is much needed for Male Patients, and will be opened so soon as sufficient funds to support it are received. The Hospital now contain eightly beds. Trained Nurses are sent out at moderate fees for Medical, Surgical, or Acconchement cases, the latter specially Certified.

A. CROSS, Secretary.

COLTHURST & HARDING,



BALL DENOTES COLOUR OF PAINT. BBISTOL — Mannfactories: Phœnix What Temple Gate. Offices: Temple Gate. Tele "Phœnix Bristol."

LONDON—Mannfactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

HARD LUSTROUS ENAMEL,
IN ALL THE ART SHADES.
For all kinds of decoration on Wood or Iron. Dry
with a surface like Porcelain. Sold in small or large
Tins, or in bulk. Prices and shades on application.

WHITE LEAD. ZINC WHITE.

PAINTS & COLOURS OF ALL KINDS.

MIXED PAINTS READY FOR USE, In Tins, 1, 2, 4, 7, and 14 lbs. each. HIGH-CLASS VARNISHES

Of all kinds, for Coschbuilders, Decorators, &c.
OIL BOILERS, REFINERS & MERCHANTS,
Export Orders receive special and prompt attention.

FOR THICK LIQUIDS.

Used Extensively by Manufacturing Chemists and Druggists.

Sent Carriage Paid on receipt of Postal Order or Cheque for 12/6 or 18/6.

FILTERING CLOTHS OF EVERY DESCRIPTION.

ANDREWS' FILTER CLOTH CO.,

330 High Holborn,



No. 2, 18/6.

LONDON, W.C F. H. BERRY, 18 PERCIVAL STREET, CLERKENWELL, LONDON, E.C.

MANUFACTURER OF CLINICAL THERMOMETERS. MEDICAL COILS. MAGNETO-

MACHINES.



ELECTRIC BELLS. BAROMETERS.

Price List, post free.

To to send for Estimates to MEDICAL AND GENERAL PRINTERS, 89 BLACKFRIARS ROAD, LONDON, S.E.

A UNIQUE ADVERTISEMENT_CHILDREN AND THEIR AILMENTS: HOW TO CURE. A BOOK FOR MOTHERS. Seed, Powder, Cash, Prescription and Recipe Envelopes in all qualifies and in every style of printing Counter and Show Bills, Trade Catalogues, Prices Current Business Circulars, and Ornamental Advertising Books at most moderate charges. Specimens and Estimates free. Terms—Cash with Order.

DON'T ORDER BEFORE SEEING BOWERS' TOILETTE GUIDE AND CALENDAR—CHEAP, GOOD, USEFUL.

Special Pamphlet prepared for efficient Advertising. New and Elegant Designs in Types and Ornaments for effective Advertising.



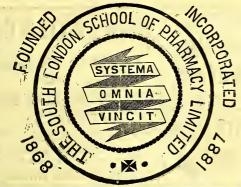
ALLEN EXTRACT. HANBURYS' MALT

"A delicious substitute for Cod Liver Oil."-Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.

In 1/- Bottles ... 9/- per doz. In 1-lb. Bottles ... 22/- per doz. ... 20/- per doz. In 1-lb. Tins ... In 4-lb. Jars (Jars 6d., returnable) 1/6 per lb.

Of all Wholesale Houses, or of the Manufacturer,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.



325 KENNINGTON ROAD, S.E

LECTURERS-

Chemistry, Physics, and Botany, DR. MUTER, F.R.S.E., F.I.C., F.C.S.

Materia Medica and Pharmacy, MR. DODD, F.C.S.

> Analytical Chemistry, MR. DE KONINGH, F.I.C., F.C.S.

Classics, and Mathematics and Mechanics,

Mr. TOWNSEND, A.C.P. and Lond. Mat.

Assisted by an efficient staff of Demonstrators.

The fees at this School are absolutely inclusive, and there are no extras of any kind. The Directors spare no expense in rendering the education thoroughly efficient and in maintaining the very high percentage of success uniformly obtained by the students for the last 20 years. The Dispensing department is most commodious and perfect, and no extra charge is made for its use.

The new Laboratory for practical instruction in Manufacturing Pharmacy is now in full work.

The School being usually full, intending students should secure their places beforehand. Entries are now being made for the first term of Session 1889-90, commencing 16th September, 1889.

For syllabus, &c., apply by letter addressed to the Secretary.

"CONCILIO ET LABORE."

THE MANCHESTER COLLEGE OF PHARMACY.

225 & 227a OXFORD STREET, MANCHESTER.

(Established in Manchester 1882.)

Director-Mr. W. SPENCER TURNER, Pharm. Chem. Aided by Mr. G. CLAYTON, Pharm. Chem.

THOROUGH.

The next Session will begin on September 2 and 3, and will include the usual Courses of Classes for the Minor and Major Examinations, full particulars of which will be sent free on application.

At the June Examinations, 4 Students from this School passed, 3 of these at their first attempt, viz.:—
MINOR—Mr. F. R. HAMPSHIRE, Mr. J. BULLOCK, Mr. W. PILKINGTON.
MAJOR—Mr. J. GARDNER.

"A HOME IN SICKNESS."



BOLINGBROKE HOUSE.

WANDSWORTH COMMON. SURREY.

PAY HOSPITAL

(aided by Voluntary Contributions) For Persons who are able to pay, wholly or partially, for their support.

RAILWAY STATION, CLAPHAM JUNCTION. PRESIDENT: CANON ERSKINE CLARKE, Vicar of Battersea.

Fees, from Half-a-Guinea to Three Guineas a week, for Nursing, Board, Lodging, and Services of a Resident Medical Officer. The Surgical cases are under the charge of a Hospital Surgeon.

Patients may avail themselves of the services of their own Medical

Apply to Resident Medical Officer, as bove.

WESTMINSTER COLLEGE

OF CHEMISTRY AND PHARMACY, TRINITY SQUARE, BORO', LONDON, S.E. The Largest Pharmaceutical School in Great Britain.

Open free to Visitors every afternoon fr:m 3 till 4 p.m.

During the past Session 144 Students passed the Minor Examination from this School, in addition to a large number of Major and Preliminary Students.

The next Session will commence on Tuesday, September 3rd.

Students desiring to enter the School on 3rd September thould send in their names as early as possible, so that benches may be reserved for them.

FEES-Prelim., to the October Exam., £1 1s., January, £3 3s. £5 5s., Dec., £9 9s., Until Qualified, £12 12s. £4 4s., Dec., £7 7s., Until Qualified, £10 10s. Major,

12 months' Tuition for Minor and Major, £15 15s.

EVENING CLASSES

Are held every Tuesday, Wednesday, Thursday, and Friday, from 7 till 9 P.M.

WILLS'S UNIVERSAL POSTAL SYSTEM.

N.B.—This course of instruction is continued through the vacation. FEES-Minor, £1 is.; Major or Preliminary, 10s. 6d.

OPINIONS OF THE PRESS.

"Those who cannot attend a school of pharmacy will find 'Wills's Universal Postal System train them in the way they should go."—The Chemist and Drugaist.

"Mr. Wills, of Westminster College, one of our most thoroughly successful tutors, extends him a helping hand, leaving it simply his own fault, and deserving it, if he blindly labours on in ignorant darkness."—Magazine of Chemistry and Pharmacy.

For Prospectus, apply to Messrs. WILLS & WOOTTON.

OF PHARMACY,

36 OXFORD STREET, LIVERPOOL

PASS LIST FOR APRIL.

Mr. J. Blenkiron, Shildon.

" H. Ellerker, Ripon.

A. F. Jewell, Liverpool.

" G. J. Maley, Douglas.

,, R. H. Mitchell, Rutherglen.

" J. L. Moxon, Wellingborough.

H. C. Thompson, Belford.

W. Lawrence, Little Brighton.

,, E. C. Sanders, Liverpool. ,, E. C. Whitby, Widnes.

MINOR.

PRELIMINARY.

JUNE-MINOR-One sent in, he passed at first attempt, viz., Mr. R. PARKER, Rishton.

ALL of these with the exception of three passed at their FIRST ATTEMPT, and the pass-list for the present session ALREADY EXCEEDS that of last session, or of any previous ones in the history of the school.

Students entering the Liverpool School of Pharmacy will find that no effort is spared by the Principal to ensure their success, and to impart knowledge that will be permanent and of use in after life. Vide advertisement in Pharmaceutical Journal next week.

THE NEXT SESSION commences on Monday, Sept. 2, and entries for the new course may be made at once.

Syllabus, Pass-Lists, Fees, &c., sent free on application to the Principal,

Mr. J. S. WARD, Ph.Ch., F.C.S., &c.

DAHL'S DYSPEPSIA CAKES.

As supplied to H.M. the Empress Eugenie.

For Indigestion and Constipation, 1s. and 2s. 6d. per box.

DAHL'S POWDERED CAKES,

For Specially Delicate Cases, 2s. 6d. per box.

DAHL'S AGENCY-41 EASTCHEAP, E.C.

SPONGE IMPORTERS.

PETERSON

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL.

FOR HOME, FOREIGN, & COLONIAL MARKETS.

BEFORE ORDERING SEND FOR

Medical Printers.

STEAM WORKS-

201 & 203, OLD KENT ROAD, LONDON, S.E.

City Offices: 24, QUEEN VICTORIA ST., E.C.

LARGE ORDERS QUOTED AT UNPRECEDENTEDLY LOW PRICES. CORRESPONDENCE INVITED.

GOOD WORK, LOW CHARGES. Established 1857.

AWARDED EIGHT

PRIZE MEDALS.

(GESTETNER'S PATENTS.)

Ts the simplest and most reliable apparatus for Printing Copies of Writings, Drawings, &c. 2,000 Copies can be taken from one original, in PERMANENT BLACK INK. No gelatine, aniline ink, washing, sticky copies, and no file or laborious writing.

THE NEO-CYCLOSTYLE PEN (IMPROVED PATENT) WRITES AS EASY AS AN ORDINARY PEN. Invaluable to Chemists for Printing Counter Bills, &c.

PRICES

COMPLETE. FROM 25/-TO 42/-

Apply for Specimens of Work and Descriptive List to

CYCLOSTYLE CO., 79a Gracechurch Street, LONDON, E.C.

THE WHOLESALE AND RETAIL Druggists' Drice Book.

By D. ELLIOTT.

NEW EDITION, revised according to the British Pharmacopenia, 1885.

Pocket Sine. Bound in Leather. Price 3c., Post Free 3c. 2d.

SAMPLES

FREE BY POST

The Clinical Clerks' Guide to Arine Testing.

On a-fold linen-lined card, 9 in. by 5 in. Price 7d., Post free.

SILVERLOCK'S

CHEMISTS'

_ 10,000, 15/ ... _ 10,000, 18/6 ... 10,000, 22/6

HEMISTS'

FROM 1/ PER 1000: A REDUCTION ON LARGE QUARTITIES.

FROM 1/3 PER 1000: A REDUCTION ON LARGE QUARTITIES.

COPPER-PLATES FOR SLIP AND DISPENSING LABELS ENGRAVED FREE OF CHARGE

Labels of every description, Price Lists, Illustrated Trade Catalogues, Prospectuses, Pamphlets, Show Cards, &c.

BELLOWS' Concentric Calculators.

A new and simple mode of ascertaining equivalents with-out the working of decimals, requiring no writing except the answer. Series A, for the conversion of Weights and Finid Measures of the Metric System into English. For the use of Medical Students, Chemists, &c. Price 3s. 2d., Post free,

H. SILVERLOCK.

Medical Label & General Printer. 92, BLACKFRIARS ROAD,

LONDON, S.E.

Analytical Exercise Sorms for Chemical Students.

Arranged by H. BELCHER THORNTON. Price 8d. per dozen Forms, Post free.

"VINOLIA" SOAP.

A Superfatted Soap, devoid of free Alkalies. It does not irritate, dry, and weaken the Skir. For Skin Eruptions, the Toilet, Nursery, and Bath.

Authoritative Analytical Report.

Chemical Laboratory, St. Mary's Hospital, Paddington, W., June 11th, 1889.

Messrs, BLONDEAU & C.E., DEAR SIRS.

I have re-ently inspected the process of manufacture of your "Superfatted Vinolia Soap," and carefully analysed the various materials employed, and the finished products.

The results show that the ingredients are of excellent quality for the manufacture of a first-class soap, and that the process is carried ont in such a way as to render the products who'ly free from all surplus uncombined alkaliue matter, and therefore incapable of acting on tender skins, in the injurious and objectionable fashion exhibited by most kinds of ordinary soap. A further amelioration is also effected by the incorporation with the soap of "plastic emo'lient matter," well calculated to soften the skin, and diminish the tendency to irritation sometimes caused in very tender subjects hy even the purest of ordinary soaps.

The "Medical" Vino'ia Soap is impregnated with balsamic essential oils of antiseptic character; whilst the "Toilet" Soap is delicately scented, and wholly free from poisonous metallic colouring matters.

I am, yours faithfully,

CHAS. R. ALDER WRIGHT, D.Sc., F.R.S. (Lecturer on Chemistry in St. Mary's Hospital M d'cal School; Cantor Lecturer on Toilet Soaps, Society of Arts, Longon; Late Juror on Soaps, International Health Exhibition, London; Vice-President, Society of Public Analysts, &c., &c.)

PRICES :-

- " VINOLIA" (for Eczema, Pruritus, etc.), 1s. 9d. and 6s. per box.
- " VINOLIA" SUPERFATTED SOAP (Medical), 2s. per box of 3 Tablets.
- " VINOLIA" SUPERFATTED SOAP (Toilet), 2s. 6d. per box of 3 Tablets.

TERMS TO CHEMISTS.

- "VINOLIA" SOAP (Medical), under 1 doz, 20s.; 1 doz. and upward. 18s. 4d.
- "VINOLIA" SOAP (Toi'et), under 1 doz, 24s.; 1 doz. and upward, 22s. 10d.
- "VINOLIA" (Small Size), under 1 doz., 18.; 1 doz. and upward, 16s. 9d.
- "VINOLIA" (Large Size), under 1 doz., 60s.; 1 doz. and upward, 57s. 8d.
- "VINOLIA" for dispensing compound prescriptions only, 3s, and 12s, less per dozen on the small and large size respectively.

Agents for BLONDEAU & CIE.-ROBERTS & CO., 76 New Bond Street, LONDON,

AND 5 RUE DE LA PAIX, PARIS.

EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.

Remittances payable to EDWARD HALSE.

TERMS

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of \(\frac{1}{2}\)d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays Id. per word, his name and address will be registered and a figure attached to hisadvertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Pestal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Drugs and Chemicals.

2-oz. cocain. hydrochlor. cryst. (Howards & Sons), 17s. 6d. per oz. Johnson, Chemist, Darley Street, Bradford.

20 lbs, syr. rhœados, 6d. per lb; 20 lbs. rad. taraxaci sic., 4d. per lb. Wm. Payne, Chemist, The Broadway, Chesham.

Formulæ.

Reliable recipes, 6d. each; full set of 130 neatly cepied in book, 7s. 6d.; send for list. "Chemist." Edwards, Wye, Kent.

Wonderfullysnecessful.—After 10 years Brooks's recipes hold their own. Send 1s. 6d. P.O. or stamps for any three as under:—"Red Rose Lotton," invaluable at seaside; "Quinine and Iron Tonic," best sold; "Embrocatio Alb.," no better made, inseparable; "Eau de Cologne," equals any sold; "Digestive Syrup," really efficacious, no humbug; "Eucalyptus Crystals," perfect disinfectant, sweet, cleanly, soluble, costs 3d. lb.; every recipe practicable; call and see samples; list, 400, free. Tom Brooks, Chemist, Hornsey, N.

Soda-water Machinery

Second - hand soda - water machinery, as sound as new, and at half the price : -1 12-gal. copper cylinder on stand complete, with safety valve, pressure and water gauges, 4-way outlet and taps, and tight pulley, by Hayward Tyler & Co., 121.; 1 16-gal. vertical copper cylinder, on tripod frame, safety valve, pressure and water gauges and tight pulley, with agitator, by Hayward Tyler & Co., 101.; 1 No. 3 sodawater machine, with 13-inch pump, 1 gal. gun - metal cylinder, water gauge, safety valve, solution pan and pipes for hand power, by Hayward Tyler & Co., 61. 10s.; I copper gas bell, 4 ft. by 2 ft., with oak tub, weight and internal pipes, &c., complete, 51. 10s.; 1 Mondollot copper purifier, 2 ft. by 1½ ft. diameter, on stand, 3l. 10s.; syphon filler by Hayward Tyler & Co., 21.; also one by Durafort, 21.; single wiring stand, 5s.; 1 copper American generator complete on stand, with 2 washers and pressure gauge, &c., 101.; 1 vertical 3-inch deep well pump (8-inch stroke); 6 10-gallon copper swing cylinders, without stands, each with drawoff tubes; filters, 2 bottle syruper by Wm. Eagle, perfectly sound; 1 4 bottle ginger-beer filler, by Farrow & Jackson; and other mineral water requisites. For further particulars apply to Idris & Co., Ascham Street, Kentish Town, London, N.W.

Shop Fittings.

A few second-hand chemist's fittings; cheap.

For full particulars apply W. B., 11 Cross

Street, Ryde, Isle of Wight.

Suitable branch, beginner; set under-counter drawers, for demy, ship labels, plasters, boxes, sundries. Particulars, Mason, Chemist, Rochdale.

Drawers, several nests, various lengths; also bent-glass counter-cases, desks, dispensing-screens, counters and shop-fittings of every description. Great bargains; at Philip Josephs', 54 Old Street, Goswell Road, London, E.C.

Second-hand show-cases for walls, counters, toothbrushes, centre of shops, sponges, de-ks, dispensing-screens, &c.; also counter nests of drawers with shelving over, looking-glasses, window-fittings, glass shelves, stands, &c.; ointment-jars (pink and blue), pill machines, specie-jars, carboys, shop-rounds, and entire fittings of shop; payments on hire system by arrangement. Natali & Co., 184 Aldersgate Street (nearly opposite Maw's).

Glass bottles, job lines .-- About 50 gross 3-oz. pale green wide-mouth rounds, 4s. 6d. per gross; 4 gross 6-oz. screw nickel-capped pomades, 16s.; 1 gross 16-oz. ditto, 30s.; 4 gross 2-oz. tinted vials, 3s. 9d.; 3 gross 1-pint (reputed) green syrups, 7s.; 4 gross 1-pint ditto, 10s.; 2 gross 1-pint ditto, 15s.; I gross 1-oz. green kalis, burst off, 3s.; 1 gross 6-oz. flat sauces, stoppered, 10s.; 10 gross 3-oz. opal screw nickel-capped pomades, 20s.; 5 gross 12-oz. ditto, 12s.; 5 gross 1-pint white syrups, 12s.; 3 gross 1-pint ditto, 20s.; 1 gross 6-draclim lavenders, 5s.; 4 gross ½ oz. oval essences, 4s.; 3 gross 2-oz. white globe-necked panels, 7s. Hearn, 381 Kingsland Road, London.

Entire stock and new fittings of a chemist's shop for disposal, including 14 ft. 6 in. wall fitting, with plate glass mirror in centre, walnut-fronted drawers, bevelled plate-glass labels and glass knobs; 10 ft. 6 in. counter, with plate-glass cases in front; writingdesk with ditto; 6-ft. bent plate-glass counter-case; dispensing counter, sponge-case and marble slab; window fittings, with plate-glass shelves, &c., &c.; 352 new gold-labelled shop-rounds and syrup bottles, 24 3-lb gold-labelled pink jars with dome covers, 12 1-lb. ditto, 4 4-gallon carboys, and other fittings; part or whole of stock at valuation. Address, Hill, 9 Vicar's Hill, Ladywell.

Literature.

"Ganot's Physics" (Macmil'an, 15s.), latest edition, 12s. 6d.; new. 76, 6.

Proprietary Articles.

About 6 doz. Bradbury's sheep dir, in good condition; cash offer. 33/12.

Offers wanted for 5 doz. Warner's 1s. 1½d. Safe pills; Safe Cure sold. 33/5.

Miscellaneous.

500 papier Moure, post paid for 8s. Mickle, Chemist, Liverpool.

A new 3-ply indiarubber garden hose, 120 feet, with brass spray, used but once, 30s. Maddison, Foulsham, Norfolk.

52-inch bicycle, very light, close built, Keen's Norwood make, ball bearings, cost 18'; price 51., approval. Henson, Norwood, S.E.

 Premier tricycle, front steerer, all plated, handsome machine; little used, and equal
 to new; price 101. J. Hope, King Street, Wicton.

Attraction for shop window, facsimiles of all the great diamonds of the world, named and fitted in case complete; cost 61.; price 50s.

Halford, Chemist, New John Street, Birmingham.

Popular microscope slides, 5s. doz.; list free; thousands for exhibiting; gorgeous polarising, brilliant opaque, &c.; 4 doz. sent carefully packed and postage paid for 2ls. to Australian Colonies, Belgium, Canada, France, Germany, India, New Zealand, South Africa, &c.; natural history books, invited in exchange, Henry Ebbage, 344 Caledonian Road, London.

WANTED.

Shop-fittings; all descriptions purchased for cash. Natali, 184 Aldersgate Street, London.

Wanted, Chemist and Druggist, January 1 and June 16, 1888. Smith, Chemist, Stony Stratford.

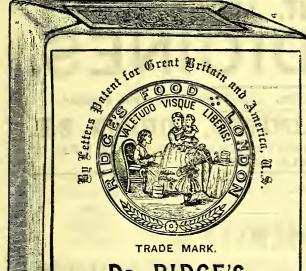
Lavender bloom; wanted to purchase a few rods when in flower; must be near London, W. Loveland, Woodham Croft, Addlestone, Surrey.

Second-hand copper steam-pan, for boiling syrups; perfect condition; lowest cash price. Letter only to "Minerals," 128 Canterbury Road, Kilburn.

PATENT COOKED FOOD

Shilling Packets, 108/- per Gross.

Shilling Tins, 120/- per Gross.



DR. RIDGE'S PATENT & FOOD

GIVES

HEALTH! STRENGTH! COMFORT!
AND QUIET NIGHTS!

MOTHERS, NURSES, INFANTS'
AND INVALIDS.

Price ONE SHILLING.

MANUFACTORY: KINGSLAND, LONDON.

ENTERED AT STATIONEBS' HALL.

Packets
and Tins
supplied
on above
terms;
less 10 per
cent. on:
£5 order;
less 15 per
cent. on



RIDGE'S FOOD has the LARGEST SALE of any Infants' Food in the World.

PREPARED ONLY AT KINGSLAND, LONDON, N., ENGLAND.

Remittances payable to Mr. PETER J. RUMNEY.

The Best and Cheapest Disinfectant and Cleanser. Easily Used. Perfectly Safe,

Absolutely Non-Poisonous, except to Insects and Parasites.

Used for all Sanitary Purposes in Households, Stables, Kennels, &c.

A Perfect Dog Wash and Sheep Dip.

Free from any Objectionable Smell, and does not leave any Stain.

Invaluable for Destroying Insects of all kinds on Plants and Fruit Trees, and

Fungus and Moss in Greenhouses or Frames.

(ne gallon mixed with 100 gallons Water makes a Strong Disinfectant, appearance of Milk. When added to the water it gives it the

AGENTS WANTED.

SAMPLE AND PRICES ON APPLICATION.

POPLAR,

Show Cards and Handbills Supplied. Pamphlets on Canine Diseases for gratuitous distribution.

Address: SPRATTS PATENT, LIMITED, LONDON, S.E.

SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A. OR YOUR WHOLESALE HOUSE.

MAJESTY THE OUR

Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.

THE PRINCE ON & H

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings and relaxed tendons in Horses. For paining after calving and lambing, and for swellen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

THE RED DRENCH.

Celebrated for infiammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 13s. per dozen Box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and deblity in Horses, for celds, chills, shivering fits, flux and diarrhea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous. 20s. per dozen Box.

THE GASEODYNE.

Used as laudanum in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes. 8s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone. 7s. 6d. per dozen; 3-dozen Box, 21s.

THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoose in Cattle, Heifers Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs 2s. 6d. per Bottle; 4-dozen Box, 7s. 6d.

THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

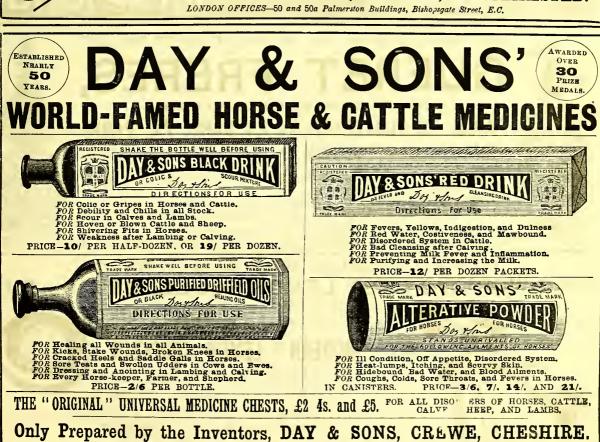
Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.





May be obtained of Sanger & Sons; Evans, Lescher & Webb; Barclay & Sons; Burgoyne, Burbidges & Co., &c., London; Evans, Sons & Co.,
Liverpool, &c. Exporters are invited to apply for terms. Liberal Discount offered.

SUPPLEMENT



Honourable Mention: International Food Exhibition, Agricultural Hall, London, Oct., 1880. Gold Medal: Soc. of Arts, Paris, 1882.

HAY'S SOLUBLE ESSENCE OF JAMAICA GINGER, A Pure Essence of the Finest Ginger. Trade Price 5/ per lb.; 12 lbs. and upwards, 4/6

HAY'S FORTIFIED ESSENCE OF JAMAICA GINGER.

For First Quality Ginger Ale.

Trade Price 5/8 per lb.; 12 lbs. and upwards, 5/

HAY'S GINGER ALE EXTRACT, For Second Quality Ginger Ale.

Imparts Pungency, Colonring, great Brilliancy, and an nnusually Fine Ginger Flavour and Aroma. Trade Price 4/8 per lb.; 12 lbs. and upwards 4/.

HAY'S GINGER ALE ESSENCE,

For Third Quality Ginger Ale. This Essence makes a beverage that is nnsurpassed by the so-called finest Belfast Ginger Ale. Trade Price 9/1b.; 12 lbs. and upwards, 8/6.

THESE ESSENCES
Have obtained the Highest Testimonials from all the
Medical Journals, and from the Principal Trade Journals
in this and other countries.
TRADE MARK



For ORANGE, VANILLA, and all other Essences SEND FOR PRICE LIST.

HAY'S HOP ALE ESSENCE

HAY'S HUP ALE ESSENGE,
For the mannfacture of the Finest Atrated Hop Ate,
This Essence is made from the choicest Hops grown,
and is unrivalled for its reculiarly fine Hop Flavour
and Aroma. Hop Ale made from this Essence has
the full flavour of the finest Hops, and is a really
appetising Bitter Beer,

Trade Price 8/6 per lb.; 12 lbs. and upwards 8j.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS.

No. 1. Highly Concentrated. Trade Price 8/8 per lb.; 2 lbs. and upwards 9/.

HAY'S SOLUBLE ESSENCE OF MESSINA LEMONS:

Makes an exquisitely fine Lemonade Trade Price 6/6 per lb.; 12 lbs. and upwards, 6/.

HAY'S LEMON FLAVOUR.

Imparts to Lemonade all the Fine Aroma and Flavos of the choicest Lemons.

Trade Price 5/per lb.; 12 lbs. and upwards 4/6





GOLD MEDAL, Amsterdam, 1883. DIPLOMA OF HONOUR, Paris, 1887.

MACHINISTS, PATENTEES.

PARIS-72 BOULEVARD DE LA GARE, 72-PARIS.

SYPHONS WITH SHORT LEVER, with Metal Tops of Pure Tin, carefully mounted, and the glass of the first quality.

GAZOSELTZ, for the instantaneous production of Aërated Beverages at table. Anyone can use them.

"CONTINUOUS PROCESS" Apparatus complete, guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of economy and sanitation.

OUR GENERAL CATALOGUE AND PRICE LIST WILL BE SENT FREE ON APPLICATION.



SELLING IN THOUSANDS BY CHEMISTS EVERYWHERE.

THE WORLD'S BEST LEMON SQUEEZER AT 6D. & 1/3

"Does not squeeze," bnt Acts Directly. and only npon the Pulp. through.

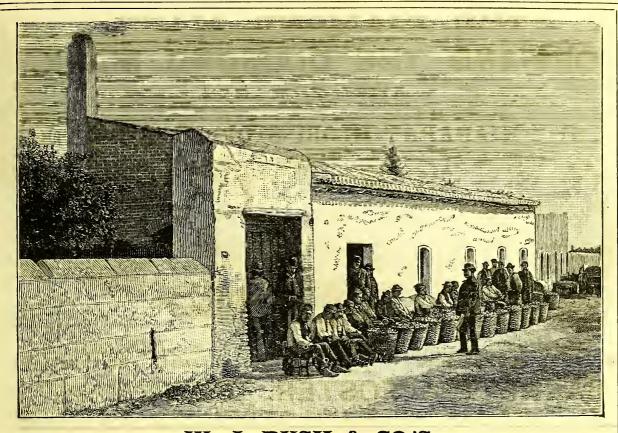
This Lemon Squeezer is to the old-fashioned article what the Railway Carriage is to the Stage Coach.

To use it, set the squeezer upon a tumbler, as shown by the accompanying illustration, place a half lemon upon the points, press downward, and rotate the lemon slightly. The ribs easily enter the pulp, the juice as it is liberated passes down through the openings into the tumbler; these openings are too small to allow the seeds to pass

A SAMPLE DOZEN SENT POST FREE ON RECEIPT OF 48. Price for Large Quantities on application.

B. & E. M'HUGH & CO., BELFAST, IRELAND.

Patents taken out for India, Canada, Victoria, Australia, Queensland, New Zealand, Cape Good Hope; also Austria, Belgium, France, Germany, Italy, Norway, & Spain.



ESSENCE OF LEMON FACTORY

Strada Antico, Cimitero, Messina.

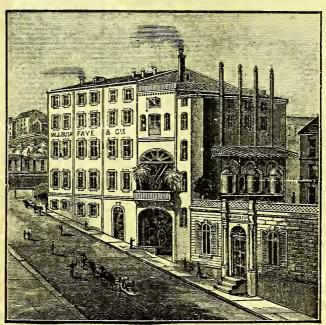
Also Proprietors

Potter & Moore

Peppermint Growers and Distillers.

MITCHAM.

ESTABLISHED 1749.



Also Proprietors

OF

Potter & Moore

Peppermint Growers and Distillers,

MITCHAM.

ESTABLISHED 1749.

W. J. BUSH, FAYE & CIE.

Distillers of Oils, Lavender, Thyme, Rosemary, and other French Essences, GRASSE, ALPES MARITIMES, FRANCE. [1]

THE DIAMOND MARK.

To secure the best Hungarian Aperient Water

DEMAND THE DIAMOND MARK,

And insist upon receiving the HUNGARIAN APERIENT WATER sold by the APOLLINARIS COMPANY (LIMITED), LONDON.

OF ALL DRUGGISTS AND MINERAL WATER DEALERS.

THE "NIAGARA" GLOBE-STOPPERED BOTTLE



Present Prices := $\begin{cases} 5 \text{ oz.} & 7 \text{ oz.} \\ 15/6 & 16/6 \end{cases}$ **EXTRA RINGS, 1/8 per Gross.**

0 oz. 12 oz. 14 oz. 16 oz. 8,0 18,6 19/6 20/6

16 oz. } At our Works. 20/6 Hunslet, Leeds, YORKSHIRE.

SEND FOR SAMPLE AND COMPARE ?

BARNETT & FOSTER,

Mineral Water Engineers, Manufacturing Chemists, and General Providers to the Aërated Water, Wine, Beer, and Cyder Trades,

"NIAGARA WORKS," 26T EAGLE WHARF ROAD, LONDON, N.



THE CHEMIST & DRUGGIST

SUPPLEMENT.

Businesses Wanted. Businesses for Disposal. Premises to Let. Auction Sales.

SATURDAY, JULY 6, 1889.

Partnerships.
Situations Vacant.
Situations Wanted. Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs, Orridge & Co, has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from exteosive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

- 1.—NEAR THE BANK OF ENGLAND.—Old-established cell-known Business, in excellent position; returns nearly £960; about £900 required.
- 2.—LONDON SUBURB, W.—Attractive locality; gcod-class Retdl; receipts nearly £800; well-fitted shop and good stock; about £775 required.
- 3.—LONDON. N.—Old-established select Business for disposal; veudor, retiring, will give good introduction; returns £650; well-fitted shop and good stock; full particulars on application.
- 4.—LONDON, S.W.—Small select Retail and Dispensing; returns about £300 yearly, capable of being much increased; good nouse, garden, &c.; full particulars on application.
- 5.—LONDON, N.—Main road; good business locality; profitable Retail and Dispensing; returns last year £500; well-fitted shop and large stock; about £500 required, or offer.

 6.—WATERING-PLACE (Inland) Season just commencing; returns £2,500; well situated in main street; commanding, handsomely-fitted shop; price about £1,500; full particulars on application.
- 7.—HOME; COUNTY.—Good Family Retail and Dispensing Business; no heavy trade; good opening for Dentistry; returns nearly £600; double-fronted well-fitted shop and good stock; good house and garden; price about £560.

- 8.—SURREY.—First-class Retail and Dispensing Business; returns average £924; handsomely-fitted shon and good house, contains 9 rooms; rent £65; full investigation permitted; about £850 required.
- 9.—WEST OF ENGLAND.—Inland watering-place; Dispensing and Retail; very good-class; corner shop; returns £600 yearly; profits very good; house is roomy and convenient; rent low; price £600.
- 10.—SOUTH DEVON.—Good middle-class Business, situate in main thoroughfare in a large town; returns between £800 and £900 yearly; very profitable; price £550.
- 11.—SOUTH COAST.—Fashionable locality; good-class Business, Retail and Dispensing; returns £550; good prices for everything; well-fitted shop and good stock; price about £500.
- 12.—SURREY.—Good town: Retail and Dispensing Business, held by vendor 15 years: returns £450, with good profits; vendor, having an offer to go abroad, will accept small premium and valuation.
- 13.—STAFFORDSHIRE,—Main and Branch for disposal (branch recently established); gross receipts £850; both businesses well fitted aud stocked, and returns increasing; about £700 required.
- 14.—SOUTH OF ENGLAND.—Unopposed country Business; situate in attractive locality; returns last year uearly £630; good house, garden, &c.; vendor's own property; price £550.

FOR SALE, by order of Trustees, the old-established Business, situate 5 FORE STREET. TAUNTON. for several years carried on by Mr. SARGENT, to be sold by valuation of stock and fixtures, with a small premium to be agreed upon, or an offer in a lump sum will be entertained. The returns average about £900 yearly, from good-class Family Retail and Dispensing. The premises are commodious, and possess good warehouse room. There is a good garden attached. As it is required that an immediate sale should be effected no reasonable offer will be refused. Full particulars, with cards to view, from Messrs. Orridge & Co.

Particulars of any of the above will be furnished on application.

N.B.-NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and

advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs, Ording & Oo. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

Messrs. Orridge & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

18-T-J. BRETT. VALUER, LEICESTER.

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

DERBYSHIRE.-Light Retail and Prescribing; returns £700; good house; price £450.

NOTTINGHAMSHIRE,—Profitable Retail, with Wines and Spirits; many years in present hands; returns £1.200; good pushing man could greatly increase; no goodwill; stock and fixtures at valuation, about £700, or would reduce stock to suit buyer.

DURHAM CO.-Light Country Retail and own Specialities; returns £700; good prices; price £570.

SOUTH-WEST.—Unopposed Retail, Prescribing, and Dispensing; returns £450; easy agency nearly pays rent and taxes; price £250.

MIDLANDS.-Returns £1.000, with profit £400; General Light Retail, Prescribing, and large proportion of own proprietaries; price £650, or valuation.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WEST OF ENGLAND.—A genuine old-established Business for disposal; returns £650; rent £30; only changed hauds once. For full particulars, apply to "Monmouth," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON, S.E.—Good-class ready-money Business, in main road, close to railway station; satisfactory reasons for disposal; long lease; low rental: 8-roomed house; good garden. Apply, A., care of Messrs. Davey, Yates & Routledge, 64 Park Street, Borough, London, S.E.

QUEENSLAND.—Old-established Business in good coastal town; returns last year over £1,500; good profits, small expeases, no opposition; price, stock, fixtures, and goodwill, £1,800. Apply, 58/64, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SURGEONS or Chemists.—An opportunity offers to a Purchaser to succeed to a business, conducted by the present proprietor for over 40 years, situate in the S.E. district; incoming about £500. By letter only to J. K., Miss Atkinson, 40a King William Street, London, E.C.

WELL-APPOINTED Pharmacy; pleasantly situated; good residential neighbourhood; nice house and garden; returns, under management, £350; vendor, having other engagements, will sell for £280, less than the value of stock and fixtures. Apply, Mr. Bishop, 119 Grosvenor

ETURNS £700.—Old-established Chemist's Business, in a prosperous city in the Midlands; price £550, or valuation, to an immediate cash purchaser. Satisfactory reasous for disposal, and all particulars, on application to "Princeps," Office of THE CHEMIST AND DRUGGIST, 42 Cannon

IN IDLAND County.—Dispensing and Light Retail Business; returning £900; full prices for everything but patents; large profits; best position in the town; good house and garden; will accept valuation without any goodwill, quick sale being desired; cash required about £500. "Argania," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A GOOD opportunity offers for acquiring a good-class Mixed Business with Gilbey's Agency in a large village in Eastern county; returns £560; uicely fitted shop, excellent house, large garden; rent £25; rates low; incoming small. For full particulars, P. C., Willows, Francis & Butler, 101 High Holborn.

IXED Drng and Stationery, in pretty village 4 miles from rail, but soon to have station on main Metropolitan extension; nearest chemist 4 miles; house and garden on lease; long established, but having been neglected will be sold for price of stock and fixtures, about £150. Fides, 60 Queen's Road, Watford.

LIGIBLE OPENING.—For sale that Business of Chemist and Druggist, at present carried on by Mr. P. M. Hendry, 3 Roseburn Terrace, Edinburgh, where a steady increasing business is being done; good dispensing family trade; owner going abroad; strictest investigation allowed. Apply to "A," Evans, Sons, & Co., Liverpool.

WINSFORD, CHESHIRE.—Chemist's Business to be sold, also good house with large garden attached; returns £300, principally dispensing, but could be doubled; death reason of sale; established 52 years, and carried on for that time by the late proprietor. Apply to John Singleton, 126 Market Street, Manchester.

GUINEAS.—Rare opportunity for young man; Chemist's Shop and Surgeon's Retail; London, N.W.; extensive dwellings to be built near; rent £55, let off £48; actual rent nominal; no reasonable offer declined as the principal cannot attend. Apply, personally, 2 Alexandra Road, South Hampstead, London, N.W.

TO Chemists.—For sale, a Branch Business in a busy thoroughfare in Newcastle; satisfactory reasons for disposing. Apply, A.B., Messrs. Ismay & Sons, Newcastle.

A N old-established Chemist's Business; would suit anyone who ean do prescribing; present proprietor retiring to private practice. Apply C. W. S., 149 High Street, Poplar, E.

LONDON, S.E.—Good Prescribing and Light Retail; old-established; double-fronted; well stocked; good opening for Dentistry: returns £450; lease 11 years; rent £50; good house and garden. "Pharma," 110 Cannon Street, E.C.

A SPLENDID chance occurs for obtaining a recently-established Retail and Prescribing Business in a working-class locality; immense neighbourhood; marketing position; to be sold under unforeseen circumstances; rent £35; price £150; this is strictly genuine. "Chemicus," 9 Swaby Read, Wandsworth Common, London, S.W.

IVERPOOL.—Everton, close to Stanley Park; returns £500; an established Retail, Dispensing, and Prescribing Business with Post Office; handsomely fitted; good house, side entrance, good yard; rent £40; profits considerably above the average. For further particulars apply to W. & S., Evans, Sons & Co., Hanover Street, Liverpool.

CAIRO.—An excellent foreign Pharmacy is now for disposal in Cairo, offering first-class opportunity for au English pharmacist. There is at present no English Pharmacy in Egypt, and there is great need for one. The business now offered can be bought for £600. Full particulars from Messrs. Orridge & Co., 32 Ludgate Hill, London, E.C.

ONDON, W.—Established over 20 years; thickly-populated neighbourhood; well-fitted shop and good stock; gross returns (1888) £1,000; cash trade; no book debts; comfortable house, private entrance; 11 years' lease to run; price, all inclusive, £500 cash. A. V. S., care of Messrs. Wright, Layman & Umney, Southwark Street, London, S.E.

25 miles of London.—Almost unopposed good-class Retail, Dispensing, and Prescribing Business; returning £700; capable of increase; good house, two gardens, greenhouse, stable, warehouse; same hands 12 years; price £475; must be sold immediately, on account of illness. G. T., Office of The Chemist and Druggist, 42 Cannon Street, E.C.

WERY profitable concern, with Post Office attached, for disposal in S.E. London; rapidly-improving and healthy neighbourhood; large handsome house and shop, splendidly fitted and well stocked; easily worked; profits average £330; lease 12 years; priced at £450; owner obliged to go abroad. Offers to "Pharmacist," Box 7635, Sell's Advertising Offices, Lordon.

CHEMIST and Dentist.—For disposal, an old-established Business, in best position for extending business; an introduction given to purchaser; present proprietor retiring from business; excellent profits; ready money; town rapidly increasing; an opportunity seldom met with. Full particulars on application to Marshall, Devonshire Buildings, Runcorn.

FOR immediate disposal, Two old-established Chemist's Businesses in good-class County towns, twenty miles apart; exceptional opening for Drug Stores; proprietor leaving district; price, one, valuation of stock and fixtures; other, valuation and small goodwill; about £750 for both. "Boaz," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street EC.

WIDLANDS.—£330 or offer; genuine improving Light Retail, Prescribing, Dispensing Business, in market town, with very good Agricultural neighbourhood; plenty of room for further increase; excelent house; large warehouse; moderate rent; long lease; returns £400. Apply, "Nemo," care of Messrs. Evans, Lescher & Webb, 60 Bartholomew Close E C.

YORKSHIRE (West Riding). — Well-established light, profitable, Prescribing Cash Business; large shop, good house; mahogany fittings, plate windows; main thoroughfare; mining, manufacturing, and agricultural district; returns over £600; scope for increase; valuation; goodwill by arrangement; a bargain; every investigation; owner leaving Retail. Address, "Ebor," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

DISPENSING and prescribing; about £1,000; South or East preferred; a partnership or assistantship, with a view to purchase entertained. "Soda," Office of THE CHEMIST AND DRUGGIST, 42 Cannon

WANTED, small or medium size Business in Birmingham, Nottingham, or other large Midland town; price not to exceed £400, unless the balance could remain for a year or two. "Rheum," Office of THE CHEMIST AND DEUGGIST, 42 Cannon Street, E.C.

BUSINESS wanted; good country market town preferred, with returns from £700 to £1,000; class of trade notso much an object as reliable business and good house. "Country," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A GOOD-CLASS Dispensing and Retail Business in good country town, or near London; returns not less than £700 yearly; capable of being increased. Address, "Spero," care of Messrs. Maw, Son & Thompson, 12 Aldersgate Street, E.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

VACANT end of July, old-established corner druggist's shop, fully fitted, with house attached. Apply 41 Great George Street, Liverpool.

SHOPS to be let, in the best part of Upper Street, Islington, suitable for any business; with back entrance, also good dwelling rooms, fitted with hot and cold water, bath, and every convenience. Apply to Goodman, Hartham Road, Holloway, N.

To BE LET as a Chemist's Shop and House, at 523 King's Road Chelsea; no opposition; thickly-populated neighbourhood; rent £65, tenant to pay taxes; or for shop and basement £45, free of taxes. Key and particulars at Mrs. Fairhall's, 527 King's Road, Ohelsea.

APPRENTICESHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, to apprentice a gentlemanly well-educated youth, aged 18 years and tall, for three years to a chemist; a member of the Church of England (indoors). Give full particulars to W. M. W., care of Messrs. Edwards & Son, 157 Queen Victoria Street, London, E.C.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, an Assistant in the Wholesale. Apply to Barron, Harveys & Co., 6 Giltspur Street, E.O.

MMEDIATELY, a qualified Assistant, accustomed to Dispensing. Apply, enclosing references and photo, to Hicks & Co., Cardiff.

WANTED immediately, Qualified Assistant; aged about 30 (outdoor). State salary and enclose carte with particulars to E. M. S., 223 Boundary Street, Liverpool.

A GOOD Junior about 21; used to mixed country business. State salary and enclose carte with usual particulars to C. D., 42 High Street, Crewe.

WHOLESALE Patent Medicine Trade.—A young man with know-ledge of the trade wanted. Apply by letter to R. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHINA AND JAPAN.—Junior Qualified Assistants, with first-class experience and references: liberal terms. Apply to Dakin Brothers, Creechurch Lane, Leadenhall Street, London, E.C.

WANTED, competent Assistant, at once, for about six weeks; satisfactory references as to character and ability required. State salary and all particulars to Thomas Fox, Great Malvern.

JUNIOR Assistant wanted, one used to country work preferred; must be able to dispense and prescribe. Apply, with references (enclosing carte de visite), stating age, salary required, height, &c., to W. E. S., 22 High Street, Brompton, Chatham.

WANTED, a qualified, experienced Assistant with first-class references, in a light retail and agricultural business; to take entire charge. Send photo and state salary required (indoors), with full particulars, to A. H. Cooper, Bradford-on-Avon.

PARIS.—Opening for an English Assistant in a good Pharmacy in the centre of the city; excellent opportunity for anyone desiring to learn the French language and French Pharmacy. Apply to D. Clerford, English Chemist, 28 Place Vendome, Faris.

WANTED by end of July a qualified Assistant of good experience and address; must be a pushing Salesman and total abstainer, Apply, strating full particulars as to qualification, age, salary required, with references, to James Lees, 217 High Street, Wattord.

TRAVELLER wanted; must have a good connection amongst chemists in the northern counties, and a good knowledge of druggist's sundries; liberal terms to an energetic and capable man. Address, "Sundries," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TRAVELLER wanted, by an old-established firm of Sponge Importers, as representative for the Midland Counties, on commission; unexceptionable references and security required; full particulars. S. R., Office of The CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR, indoors, for Light Retail; hours, 8 to 8, Satnrday, 10; one afternoon weekly allowed, and alternate Sundays. Send particulars, salary required, references, and when disengaged, enclose photo; applications not answered in 4 days declined. Cardwell, Minster Street, Reading

Wanted at once, Junior, for Mixed Business; outdoors. State age, experience, salary required, &c., J. H. Morris, Astley Bridge, Bolton.

WANTED immediately, a Junior or Improver of good address, with knowledge of Dentistry; total abstainer; required to take part Sunday duty; sleep in. Apply, with references, full particulars, salary, &c., to "Dentine," care of Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

WANTED immediately, Assistant (ontdoor): Minor qualification preferred; accustomed to brisk, ready-money trade; able to prescribe and extract teeth. Permanency to a suitable man. Apply, with full particulars as to salary, &c., to Robert Hall, Chemist, Middlesborough, Yorkshire.

AN Assistant or a Junior, with some experience in a prescribing retail with dispensing and teeth extraction, in a country town one hour from London; must be willing and obliging, and if sceking a permanency preferred. Address, up to 14th inst. 'stating age, height, salary, iu and outdoors, Mr. A. Hempel, Poste Restante, Brighton.

A SSISTANT, to manage good branch; agcd about 25; no use unless energetic; of good address, and obliging; capable of working up new mixed business; Post Office attached: references must bear strictest investigation; member of Christian Ohurch preferred; salary £50, indoors; state full particulars. Start, Chemist, Long Eaton.

COMPETENT indoor Assistant, by July 15. for mixed country business, with wines and spirits; aged 23 or 24; abstainer, and one desiring permanency preferred; must be well recommended, and able to take sole charge when required. Apply, with full particulars, and enclose carte, to George Peacock, Chemist, Kirbymoorside, Yorks.

ROYAL Surrey County Hospital.—Non-resident Dispenser required: must have passed qualifying examinations of the Pharmaceutical Society. He will be expected to devote his whole time to the work of the Hospital; salary £90 per anuum; testimonials of practical experience and character will be required: duties to commence on the 20th July, 1839, Applications to be sent to the Secretary, Royal Surrey County Hospital, Guildford.

APOTHECARIES' HALL OF IRELAND.

WANTED, a Manager to take entire charge of the Drug Department and superintend the general business; a Gentleman of extensive experience in the purchasing of Drugs, and capable of furnishing contracts, with a knowledge of the country, accustomed to travel, will be preferred; age under 40: security will be required. Apply, by letter, to Dr. Montgomery, the Secretary of the Hall, 40 Mary Street, Dublin.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

JUNIOR; aged 24; 8 years' experience. Apply, Z., 107 London Street Reading.

AS Junior: aged 19; good reference. W. Burston, 57 Osmaston Street, Derby.

ANAGER or Temporary; 29; disengaged July 27th. W.E. Bolton, 2 Chapel Bar, Nottingham.

AS Junior in London; tall; 5 years' experience; small salary; aged 24.

A. Lemmon, Medical Hall, Yalding, Kent.

SITUATION in Wholesale wanted; used to Retail trade; aged 23; 6 years' character. W. Hatton, Southgate, N.

AS Junior; aged 20; height 5 ft. 9 in.; London preferred; 4½ years' experience; good dispenser. H. H., 4 Bell's Buildings, Fleet St., E.C.

JUNIOR; 5½ years' experience; aged 19½; Prelim.; Lordon; disengaged. "Sootsman," 17 Wheatstone Road, North Keusington, W.

A GERMAN Apothecary's Assistant, aged 24, desires a similar engagement. Please address, Rosemann, boebath Colberg, Hofapotheke, Germany.

LOCUM-TENENS; experienced; abstainer; references; engaged August 5 to 17. "Veritas," 10 Bond Street, Higher Broughton, Mauchester.

FOR August, as extra hand or Locum; aged 28; height 6 ft.: London and Brighton experience; Homeopathy, &c. Wester, 13 Merrick.

PRANCH Manager; Eastern or Midlands preferred; 11 years' experience; good references; disengaged. W. Howe, Old Albion Brewery, Sbeffield.

ASSISTANT; height 5 feet 4½ inches; aged 21; with first-class reference and experience; disengaged July 16. J. W. S., 3 Cocil Square, Margate.

A CHEMIST calling on customers in all provincial towns is open to represent at same time any well-known house. Address, "Pharmacist," 48 Croydon Grove, Croydon.

JUNIOR, nearly 22; London experience. J. C. S., 1 Noel Street, Wardour Street.

JUNIOR; London; time for study; good references. Argles, 285 Brockley Road, S.E.

AS Assistant or Branch Manager; agod 28; height 5 ft. 8 in. J.C., care of Chemist, Bagshot.

OCUM-TENENS; town or country; aged 40; qualified. "Chemist,"
Medical Hall, Llandudno.

TEMPORARY.—Day, week, month; experienced; terms moderate; disengaged. W. A., 115 Barnsbury Road, N.

AS Wet Man, or a good position in Wholesale or Retail; married. "Chemist," 17 Plum Street, Seaforth, Liverpool.

UNIOR, or Surgeon's Dispenser; London; time for study; aged 20½; experience, 4 years; Prelim. Jones, Ricbards', Chemist, Aberdare.

A SSISTANT or Manager; 12 years' London and country experience in first-class retail; aged 26; Minor. T. Longdin, Outwood, near Wakefield.

BRANCH Manager or Assistant in brisk business (locum-tenens or permanency); qualified; aged 22. "Chemist," 6 Ashdown Road, Brigbton.

TEMPORARY or permanent; outdoors; Liverpool or district; Prescribe and Extract; liberty July 18. B., 67 Church Road, Tranmere.

TEMPORARY, during illness or absence; varied experience; abstainer; registered; terms moderate; now disengaged. "Chemist," 159 Copenhagen Street, N.

BRANCH Manager or otherwise; over 20 years' experience; excellent references; qualified; successful as branch manager. "Sulphoual," 34 Addington Street, Ramsgate.

CHINA.—Assistant or Senior; 12 years' first-class experience; highest references; age 27. Address, 39/17, Office of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

JUNIOR; 4 years' experience; height 5 ft. 9 in.; disengaged middle of July; Loudon preferred; abstainer; good references. "Statim," 62 Beckway Street, Walwortb, London.

TRAVELLER, with good connection amongst Chemists in town and country, seeks a situation; excellent references; aged 32. Apply, A. G., 12 Brailsford Road, Water Lane, Brixton, S.W.

TRAVELLER; disengaged; sound connection South Wales and West of England; references and security. Apply, 39/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

DISPENSERSHIP, Medical or otherwise; thorough Prescriber, &c.: Retail knowledge nil, having been medically engaged; registered; married; state salary, &c. "Ohemicus," 50 Rossiter Road, Balham.

ANAGER or Senior, Provincial Wholesale; outdoors; qualified; knowledge of best markets; experienced all round; quick, accurate, tact in management of staff, &c.; disengaged. W., 20 Alice Street.

MR. H. SEYMOUR, Locum-Tenens for Chemists, is prepared to accept engagements in absence of principal, or occasional help; also to dispense for Surgeons or Public Institutions. Address, 37 Milk Street, Bristol.

TEMPORARY Manager; day or week; qualified; married; experienced; highest references; diseugaged 19th; negotiations entertained for remainder July and August. "Ixion," 75 Hill Street,

A DVERTISER, holding public appointment, being engaged three hours in the forenoon only, would be glad of employment as Traveller, &c., for town aud suburbs; aged 27. "Traveller," 113 Holborn, E.C.

THREE Months' engagement wanted; 10 years' experience; have managed branch; understand Post Office duties; aged 25; undeniable references. Apply, 39/2, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E C.

MANAGER for Branch or Dispenser to Institution; married, no family; aged 32; 15 years' first-class experience; late Hospital Sergt, in Medical Staff Corps; nearly 4 years managing branch for present employer; highest reference from same and others; disengaged July 17. s. T., 222 Rimrose Road, Bootle.

MANAGER or Senior; Dispensing, Retail, and Prescribing experience; highest references; qualified by exam. "Probus," 2 Pixholme Grove, Dorking.

AS Manager, with view to purchase, or Partnership with Christian man in good-class business; good references; abstainer; town or country. "Verax," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A PHARMACEUTICAL Chemist seeks an engagement as Manager, Senior Assistant, or a position of confidence, either at home or healthy locality abroad; aged 30; single; height 5 ft. 11 in.; 16 years' varied experience; highest references; at liberty early in October, or sooner if necessary. Address, "Major," care of Messrs. Evans, Sons & Co., 56 Hanover Street, Liverpool.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading. which can be obtained on application.

HEEP DIP, soluble fluid carbolic; one of the best dips (similar to Little's); a few casks at 2s. per gallon cash, to clear. "Chemicus," Charles Tayler & Co.'s Advertisement Offices, 154 to 157 Fleet Street, E.C.

ANTED, Chemists as Agents for "Griffin's Weed Exterminator"; liberal commission allowed; no risk. Please apply to William Griffin, Agricultural Chemist, Luda Works, Louth, Lincolnshire.

STUDENTS' AIDS TO EXAMINATION.

RELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Casar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. MINOR.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

PRELIMINARY AND MINOR.

LL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established References to past and present Pupils. 32 Pupils passed the last Examinations.



TOBACCONISTS COMMENCING.

Write for Illustrated Guide, "How to open respectably, £20 to £1,000, 'post free. "The Tobacconists' Outfatting Company (Registered)," (late H. Myers & Co.), 11 Beech Street, London, E.C. Largest complete Tobacconists' Furnisbers in the world.

STIRLING'S "MINOR" AIDS.

Organic Materia Medica. Concisely tabulated, thus saving much time and laborious reading. Post free, ls. 1d.; cloth gilt, ls. 7d. Notes on Dispensing. 3rd Edution. Post free, ls. 1d. Botanical Companion for Beginners. Post free, 7d. Doses, Sp. Gravituse, and Percentages of B.F. 1385. Vest pocket edition.

Post free, 6d.

Sold by H. Kimpron, 82 High Holborn. All orders by post abould be addressed to the Publisher.

GOWER, 4 Lancing Road, Ealing, London (late of Hackney).

& CUCUMBER, GLYCERINE

First Quality, 9d. per lb., by using

Rouse's Concentrated Cucumber Paste.
In Jars (free), ½ lb. 2s. 3d.; 1 lb. 4s. 3d. net.
Making 3 lbs. and 6 lbs., costing ½d. per oz., by simply adding Water
and Glycerine.

Thro' any Wholesale House, or post free for P.O.
PHARMACEUTICAL CHEMISTS,
12 WIGMORE ST., LONDON, W.





SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED.



SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them THREE GOLD MEDALS, which were awarded as follows:—

1st-SODA-WATER MACHINERY (Highest Award possible).

1st-ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).

1st-PATENT AND ORDINARY BOTTLES (Highest Award possible.)

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES, LONDON, E.C.

19



ROBINSON'S

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liehig's Beef Wine manufactured by Mr. B. Robinson, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Mat, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

December 15, 1888.

Wilton Fever Hospital, Salford, September 2nd, 1888.

Dear Sir,—I am in receipt of the samples of Meat Wine you sent to me. I was so pleased with the results obtained from it that I have obtained a further supply, and have given it a rather extensive trial. I have found it invaluable as a medicine in the treatment of Enteric and Scarlet Fever, sufferers from these diseases rapidly improving in strength and weight nuder its influence. I think the combination a very happy one, I am, dear Sir, faithfully yours,

TO B. ROBINSON, Esq.

Wilton Fever Hospital, Salford, September 2nd, 1888.

I was so pleased with the results obtained from it that I have obtained a further supply, and have given it a rather extensive trial. I have found it invaluable as a medicine in the treatment of Enteric and Scarlet Fever, sufferers from these diseases rapidly improving in strength and weight nuder its influence. I think the combination a very happy one,

I am, dear Sir, faithfully yours,

JOHN MULLEN, Resident Medical Officer.

PREPARED BY

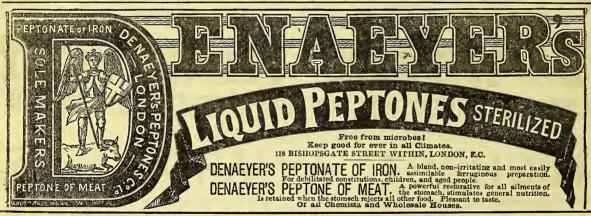
BENJAMIN ROBINSON, THE LABORATORY, PENDLETON, MANCHESTER.

N.B .- A Sample Bottle sent FREE on receipt of Professional or Business Card.

Specially prepared for Quinine Wine, does not deposit, any climate, and well adapted for Export Trade. Supplied in Casks Terms on application.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/6 per gallon; in 2-Gallon Jars, 6/- per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.



Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lhs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time. They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet. Samples and Prices sent on application to

WILKINSON & SONS, 37 Canning Place, LIVERPOOL. P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

Dealers in every description of Isinglass.

MEAT. PEPTONE. COCOA.

This Preparation of Cocoa and Peptonised Meat Extract forms one of the most powerful concentrated foods known; it is indispensable to invalids, a boon to the healthy, and to those of a weak digestion. From its richness in nitrogenous principles (21 per cent.), it contains all the elements of tissue muscle, and blood formation, in a form ready to be assimilated at once, heing predigested. In Powder for Breakfast, &c., or in Tablets.

As taken by the late EMPEROR FREDERICK on the recommendation of Dr. Leyden. NO OBJECTIONABLE TASTE. PERFECT FLAVOUR. EASILY DIGESTED.

"The article is in every way of satisfactory quality."—British Medical Journal. Price 1s. 6d. per Tin. Price 1s. 6d. per Tin.

Sole Agents-SCHEIBLER BROS. & CO., 23 New Broad St., E.C.

20

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each

Delicious Blancmange in a Few Minutes. Boxes, 6d. and

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In 1- and 1-pint boxes, 3d. and 6d. each.

PROPRIETORS-GOODALL, BACKHOUSE & CO., LEEDS.

MEDICINES

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS

RER" 000D VALUE

THE GIANT 1d. BOTTLE OF

LARGEST IN THE TRADE.
In Half-Gross Boxes, at 6/6 per Gross.

"BOROURH" KETCHUP, WORCESTER, HARVEY, YORKSHIR OR READING SAUCE.

1d. Sample Bottles, dozen parcels	•••	per gro	ss 5/ ext	ra qual	ity 6/
1d. Giant Bottles, dozen parcels		"	6/6	n	6/
	-	99	6/	99	8/
1-Bottles (flat or round), reputed 1-pint	•	39	6/6 * 16/	99	8/
1-Bottles (flat or round), reputed pint	~	39	26/	19	72/
1-pint Imperial Round Stoppered Bottles	_	39 33	30/	P5	24/ 32/ 36/ 60/
I nint Imperial		"	50/	ä	60/
12½-gallon Casks (casks free)	••	each	20/	99	25/

ROYAL

In 8-oz. square-stoppered bottles, 48/ per gross. A rich, fruity Sauce of fine flavour, and worth especial attention, as being the most saleable in the market.

Bamples of any kind Sent Free of all Cost by PHTHR, TYRHR, The "Borough" Ketchup and Sauce Maker, 70 LONG LANE, BOROUGH, LONDON, S.E.

SCOTCH AGENCY: 113 WEST NILE STREET, GLASGOW.

Also Sold by W. & C. PANTIN, Upper Thames Street, LONDON, E.G.
BURGOYNE & CO., 16 Coleman Street, London, E.C.

JOS. TRAVERS & SONS, 119 Cannon Street, London, E.C.

CHAS. SOUTHWELL & DRINKS,

.. 53/0 Per cwt. .. 1-lb. tins, per dozen .. 6/8 .. 12/9 2-1b. " ,, 4-1b. 25/0 6d. bottles " .. 4/4 Pink Sherbet 1d. per lb. extra. GINGER BEER POWDER. Per cwt. 1-lb. tins, per dozen ... LEMON JUICE. Reputed pints, per dozen .. 3/3 quarts, " 5/6 LIME JUICE.

Reputed pints, per dozen ..

quarts, "

PERSIAN SHERBET.

LIME JUIC	E C	0F	RDIA	L.
Reputed pints, pe	er do:	zer	ι	4/9
" quarts,		"	• •	8/0
CITRO T	ART	R.A	TE,	
commonly	y kno	wi	as	
CITRATE OF	F M.	ΑG	NES	SIA.
		N	o. 1.	No. 2.
Per cwt			85/0	70/0
" lb			$9\frac{1}{2}d$.	8d.
1/0 bottles, per de	ozen		5/0	_
1-lb. tins, "			10/9	9/0
2-lb. ,, ,,			20/6	17/0
FRUIT	SYR	UF	S.	
4/6, 6/0, and		-		ozen.

LEMON SYRUP. 4/3, 5/6, 7/0 per dozen.

All the above are of our own preparation (under the superintendence of a duly qualified Analytical Chemist), and purity is guaranteed.

CHAS. SOUTHWELL

4/6

8.0

DOCKHEAD, LONDON,

HIGHEST AWARD AT THE INTERNATIONAL EXHIBITION, LONDON, 1885.



"First-class heverages."—The Grocer.

"Have an established reputation."—Nonconformist.

"That Beckett's Fruit Syrups are equal to what their proprietor claims for them is proved by the fact that they are largely used in Coffee Houses throughout the country."—Coffee Public House News.

Analytical Reports from Granville H. Sharp, Esq., F.C.S.; G. Bostock, Esq., F.C.S.

Price Lists, Testimonials, and other information sent post free on application to the Manufacturer—W. BECKETT, Heywood, Manchester.

WONDERFUL SUCCESS!!

> BEER NON-INTOXICATING

> > Made from MASON'S Original

Composed of Yarrow, Dandelion, Comfrey, & Horehound. ENLARGEMENT OF SIZE.

A Sixpenny Bottle makes EIGHT GALLONS of

HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Cramy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

REWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT. Sold in Bottles at 6d., 1/, & 2/ each, with directions.

Make Temperance Wines in a few minutes. Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d. 1s., and 2s. each. Quotations on application.

SOLE INVENTORS & NEWBALL & MASON,

Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.



LONDON:

25 Great Windmill St., W.

Depot of DIGNE'S ENAZYMES.

DISPENSING BOTTLES & PHIAI

The following are our greatly Reduced Prices:-CLEAR BLUE TINTED.

3 and 4 ez. 6/8 per gross. | 12 ex. 11/8 per gross 6 and 8 ez. 7/8 " | 16 ez. 15/6 "

WHITE MOULDED PHIALS.

LONG OR SQUAT SERIES.

,,

Prompt attention to country orders. Packages 1/each, allowed for if returned. Sample bottle sent free on application.

ISAACS

GLASS BOTTLE MANUFACTURERS, 25 Francis St., Tottenham Court Road, London, W.C. Bankers, London and Westminster Established upwards of 70 years.

CIGARS & CIGARETTES.

M. & R. PEACOCK.

Tobacco, Cigar, & Cigarette Manufacturers,

KINGSLAND RD., LONDON, N.E.

Sole Manufacturers of the Celebrated Brands-

ROYAL CHARTER"

UPPER CRUST."

Sold in Packets only.

Those who deal in these Goods, or intend doing so, should write to the above Manufacturers for Price List.

VALUABLE AGENCY.

REGISTERED.



NOTE.

These Trade Marks appear on every Package.

WHERE VACANCIES MAY EXIST, AGENTS ARE APPOINTED BY

THE GREAT TOWER STREET TEA COMPANY, LIMITED, **JEWRY** STREET, LONDON, E.C.

PREPARED BY THE SWISS MILK CO., ST. GALL, SWITZERLAND.

UNSWEETENED OR SWEETENED.

The cheapest, purest, and most nutritious of all similar productions.

The Lancet says:—A very interesting and valuable preparation.

British Medical says: -- The preparation represents the highest possible degree of concentration which can be obtained, and is sure to be appreciated.

The Medical Press says: A milk which is with difficulty distinguished from fresh cow's milk.

London Office, 61 Mark Lane, E.C.

A Digestive

Extract of Tea.

"The aroma and the caffeine are preserved, and the tannin is neutralised and rendered innocuous."—Lancet, May 4, 1839. SAFE ONLY TEA FOR WEAK DIGESTION. THE Wholesale Agents-BARCLAY & SONS, Lim., Farringdon Street. In bottles, price 1/ and 2/6; Samples 6d. each. * A LARGE SALE MAY BE EFFECTED AMONGST DYSPEPTIC CUSTOMERS.

Extract of Meat.

to the Office. As supplied War 6/2 per des. 6/4 6/7 " ON APPLICATION.

23

ROBERTS &

9 CLERKENWELL ROAD, LONDON, E.C. TELEGRAPHIC ADDRESS-"FEEDING BOTTLES LONDON."

ILLUSTRATED CATALOGUE,

SUNDRIES, SURGICAL APPLIANCES, MEDICINES, ETC., NOW

FREE ON APPLICATION. POST

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE



Which may be known by the Name of the Inventor being on the Government Stamp.

Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

particularly AMERICAN Cautioned!! are

Telegraphic Address-"FEEDING BOTTLES

AY-ROBERT

REGISTERED.

This Water Bath will supply a long-felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance into the bottles or jars in which they are sold. In the "MAY-ROBERTS" Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT. Each 3/0

5 PINT.

10 PINT. 9/6

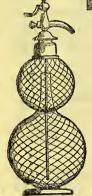


Telegraphic Address-"FEEDING BOTTLES LONDON."



DOWN AGAIN!!!

VRE'S



2 PINT. 3 PINT. 12/520/9 Caned, each ... 7/ 8/ 2 PINT. 3 PINT. 5 PINT. 8 PINT. 18/11 6/6 11/9 Wired, each

22 worth or more, 5 per cent. discount.

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

Telegraphic Address-"FEEDING BOTTLES LONDON."

Telephone Number, 1852.

Telegraphic Address-CHEMICUS LONDON. ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE .- The Folios shown in this Index are those at the FOOT of the Page, and not at the Tep This arrangement is necessary in order to meet the requirements of the Post Office.

Allia di l'angoment la	1
Foot of page	Foot of page
ALOFAS, THE, CO	GOODALL, BACKHOUSE & CO. Household Requisites and Vorkshire Relish, Wholesale and Export Drungists 21 GOODALL, E. F. GOVERNMENT SANITARY CO., Disinfectant 53 GREAT TOWER STREET TEA CO. Tower Tea 23 GREETER W. W. CO.
Filtering Closs 8	GOODALL, E. F Levigatino Machines 53
APCILINARIS CO. Hungarian Aperient Diamond Mark Woter 18, 31	GOVERNMENT SANITARY CO., Distingertant 55 GREAT TOWER STREET TEA CO. Tower Tea 23
	GREEFF, R. W., & CO. Thiol, Sulphonal, and Chemicals 39 GRINDLEY & CO
AUSTRALIAN MEAT CO. "Ramornie" Extract of Meat 23	GRINDLEY & COSheep Dip 14
"Ramornie" Extract of Meat 23	GUERET FRERESSyphons and Gasogenes 16
BAISS BROS. & CO. Notice to the Trade, re Fire BARBER, G., & CO	HAMILTON & CO
BARNETT & FOSTER The Niagara Bottle 18	
BARRON, HARVEYS & CO. Notice to the Trade 34 BECKETT W Fruit Essences 22	HARVEY, J. & W., & COSpirits 53
BEECHAM, T. Pills 40	HEARON, SQUIRE & FRANCIS
BEEDZLER, J., & CO	Pharmaceutical Preparations in Vacuo 30 HILL, A. S., & SONS
BILLAULT Pharmaceutical Preparations 38 BLONDEAU & CIEVinolia 11	Tincture, Granular Preparations 32
BOEHM, FAlkaloids and Pure Chemicals 38	HOCKIN, WILSON & CO. Lime Jui e Cordial. Quining & Iron Tonic 50
BOWERS BROS. Printing 8	HOMEOPATHIC HOSPITAL
Syphone and Selizopenes, Soda-water Machinery 19	HOOPER & CO. Carnabyn and Sparkling Seltzer
BROTHERS, J., & CO. Wholesale and Export Druggists 58	COVER
BRECKNELL, TURNER & SONS, Saddle Soaps 48	HORN & SONPatent and Trade Mark Agents 56 HOWARDS & SONSAmmonii Carbonas 33 HUNGARIAN APERIENT WATER
BURROUGHS, WELLCOME & CO.	HUNGARIAN APERIENT WATER Diamond Mark 18
Malt Question 29 Bemrose's Guide to Poris 30	HUNT, W. F., & COBottle Caps 22
BUSH, W. J., & COEssential Oils 17	INGRAM & ROYLE
CADBURY BROS	Carlsbad Waters and Salts . COVER ISAACS, I., & CO
CADBURY BRCS	
CHESEBROUGH, THE. CO. Petrolatum 4	JAHNCKE, E. Bixes 7
Oils, Paints, and Varnishes 8	JAHNCKE, E
COOK, EDWARD, & CO. Antiseptic Soap 58 COOPER & NEPHEWS Sheep Dip 15	Disinfectant 54
CRITCHLEY, TStarch Gloss 55	KUHN, BSalo!, Papain Finkler 36
CURTIS & CO. Granular Effervescent Preparations 37	
Granular Effervescent Preparations 37 CYCLOSTYLE, THE, COFacsimile Writing 10	LESLIE, J., & COPure Spirits of Wine 53 LIVERPOOL LINT COLint 56 LIVERPOOL SCHOOL OF PHARMACY, THE 9
OAHL'S AGENCY	LIVERPOOL SCHOOL OF PHARMACY, THE
DAVIS, J., & CO. (LIM.)	LOF THOUSE & SALTMER Wholesate Druggists 36 LYNCH & CO L Brand Dispensing Bottles COVER
OAHL'S AGENCY Dyspepsia Cakes 10 OAVIS, J., & CO. (LIM.) Printing 10 OAV & SONS Horse and Cattle Medicines 15 OAY, SON & HEWITT Horse and Cattle Medicines 10	
AY, SON & HEWITT Horse and Cattle Medicine Chests 14 BENAEVER'S PEPTONE CO. Meat Peptones 20 DINNEFORD & CO. Fruit Magnesia 43 UKAS & CO. Brushes 57 UURN, W. G., & CO. Fruit Salt Baking Powder 56 URRANT & CO. Drange Wine 53	MACK, H. Pasta Mack 49
DINNEFORD & CO. Fiuid Magnesia 41	MACNAIR, A., & CO
DUKAS & CO. Brushes 57 DUNN, W. G. & CO. Fruit Salt Baking Powder 56	MANCHESTER COLLEGE OF PHARMACY 9
DURRANT & COOrange Wine 53	MANN, C. A. & CO. rerfum ry 28 MASON, W. B. Patent Meaicin s 34
ELLIMAN SONS & CO. Embrocation 3 TEXT 16	MACK. H. Pasta Mack 49 MACNAIR, A., & CO. S.J. Vini Rect. 51 MACNAIR, J. & D., & CO. Shet or G. am, 56 MANNAIR, J. & CO. Shet or G. am, 56 MANNAICHES FER COLLEGE OF PHARMACY 9 MANN, C. A., & CO. Cerpum 7y 23 MASON, W. B. Patent Meaicin. 8 MAW. S. SON & THOMPSON Bath Glores and Sponor Bag., 45, Papier Moure
EXCHANGE COLUMN 12	
FINK, F. & CO. Specialities 55	MAY & BAKER Feeding Bottles 51
FINK, F., & CO	Reduction in the Price of SulphonalCOVER
Concentrated Liquors, 5TEXT 16	MAY, ROBERTS & CO. Illustrated Catalogue, 1889 24
FORTESCUE, C., & CO. Devonshire Cream Ointment 56	Seltzogenes, Water Bath, Dr. Hooper's Pulls McHUGH, B & E. & CO Lemon Squiezer 16
FRENCH HYGIENIC COCoca Win: 42	McKESSON & ROBBINS
	MOKESSON & ROBBINS Granules 33 MELIN, C Capsuling Machine 53 MILLAR, A. & CO. British Wines 34 MISCELLANEOUS ADVERTISEMENTS
GELSTON, P., & CO Medicated Soaps 57	MISCELLANEOUS ADVERTISEMENTS
GELSTON, P., & CO. Medicated Soaps 57 GENT & CO. Medical Electricass. TEXT 16 GIRAUD FILS, IN. Perfumery, Essenial Oils 56 GOAD & CO. Tooth-brush & Medicine Spoon 49	Coloured Supplement
GOAD & CO	MOSS, J. & CO

	Foot of pa	20
	NATIONAL CHEMICAL CO. Chloride of Lime NEWBALL & MASON Non-Intoxicating Beverages NEWBERY. F., & SONSBerd ie's Perfumes	27
	NOAKES, B., & CO.	27
	Tin Canisters and Boxes 52TEXT	16
	OPPENHEIMER BROS. & COCream of Malt	37 49
	PARMENTER, I. W., & CO. (LIM.)Boxes	46
	PEACOCK, M. & R Tobaccos and Cigarettee	22
	PETERSON, M., & CO. Sponyes	56 10
	PHILLIPS, G. & CO. Pure Spirits of Wine	42 53
	PARISIAN VAPORISER CO. PARMENTER, I. W., & CO. (LIM.)	33
	POWELL, A. E., & CO	43
	QUILLIAM, J., & COEmp. Adhæsivum Opt.	56
	RENNER, DRVaccine Lymph	49 13
	ROBBINS, J., & CO. Methylene	4#
	ROBERTSON, J., & CO.	57
	RENNER, DR. Vaccine Lymph RIDGE'S, DR. FOOD ROBBINS, J. & CO. Metalline ROBERTS & CO. 'Vinotia ROBERTSON, J. & CO. Warne Wine ROBERTSON, B. Liebig's Meat and Matt Wine ROYAL (DIOK'S) VETERINARY COLLEGE	20
	SANGER, J., & SONS Addenda to Price Current	44
	SANTHA TEA CO.	23 20
	SEABURY AND JOHNSON Bunion Planer	3/
	SANFORD & SON Vermin-killer SANGER, J. & SONS Addenda to Price Current SANGER, J. & SONS Addenda to Price Current SANGER, J. & SONS Addenda to Price Current SANTHAS, THE. CO. (LIM.) Disinfectant TEXT SANTHA TEA CO Kaiser Cocca SEABURY AND JOHNSON Sunion Plauve SEQUAH (LIM.) Prairie Flower and India in Oil SHIRLEY A. W. Smellon Fure Olto of Root SILVERT DE CARBON FILTER ON FOREST SILVERT DE CARBON FILTER OF SILVERT DE CARBON FILTER OF SILVERT DE CARBON FILTER OF SILVERT DE CARBON FILTER ON SILVERT DE COMPANY OF SILVERT DE CARBON FILTER DE COMPANY OF SILVERT DE CARBON FILTER DE CARBON FI	37 49
	SILICATED CARBON FILTER CO Filters	46
	SMITH, T. & H. & COSalt of Morphia	10 35
	SOUTH LONDON SCHOOL OF PHARMACY	
	SOUTHWELL, C., & COSummer Drinks	9
	SPRATTS PATENT (LIM.)Dog Medicines SQUIRE & SONSElixir Cascara Sagrada	14 31
	STEPHEN SMITH & CO. S.V.R. STERN, G. & G. Pumiline TEXT	38 16
	SOUTH LONDON SCHOOL OF PHARMACY (LIM) SOUTHWELL, C., & CO Summer Drinks SPRATTS PATENT (LIM). Dog dedicines SQUIRE & SONS Elizir Cascara Sagrada STEPHEN SMITH & CO S.V.R. STERN, G. & G Pumiline. TEXT SWISS MILK CO, Milk in Powder	23
	THOMPSON WALTERS HOLE & CO (LIM)	55
	Se targenes, Inh tlers, Syringes TOWLE, A. P., & SON	40
١		21
1	VACCINE ASSOCIATION Caution 4 Pure Vaccine Lymph	49
	WARREN, A. & J	57 8
	WILKINSON, A., & SON	20
	WILSON & CO	57 57
	WARREN, A. & J. Refined Wool Fat WHITLA, DR., M.D. Hops WILKINSON, A., & SON Hops WILKS & WOOT FON (Westminster College) WILSO, & CO Patent citcky Fly Papers WOOD'S, W. J. SONS & CO.	49
	WRIGHT, LAYMAN & UMNEY Fould ExtractsTEXT 16COV	s R
	Manufacturing Phirmaceutical ('hemista	ER
	WYLEYS & CO. Horse Ball, Glycerine Suppositories, &c.	35
	YOUNG, HCorn Plasters	37

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names de not appear above are published in one of the other issues of this month. AERTD & MINRLS ACETIC ACID

APERTD & MINRLS

Apollinaris (Hungarian Aperient Water, Diamond Mark, Friedrichehall Apollinaris)

Barnett and Foster
Catley Abbey Mineral Water Carter and Wright
Chemists' Aërated Waters
Association.
Ellis (Ruthin)
Hassall and Co. (Citrie Acid Phospho)
Hay, W.
Idris and Co.
Ingram and Royle
Jewsbury and Brown
Kinmond and Co.
Mills and Co. (Bourne)
Schaoht, W., & Co. (Kronenquelle)
Taylor, T. and F. J.
[See GINGER ALE.]

Favarger, H. Pevre, T. Gueret Frères Tyler, Hayward, and Oo.

ALKALOIDS Howards and Sons (Cinchona) Smith, T. and H.

Cocking and Co. (Japan)
Felton, Grimwade and Co.
(Melbourne)
Fougera and Co. (New York)
Kempthorne, Prosser & Co. N. Z
Lennon, B. G., and Co.
Levy, Jules
Peake, Allen and Co.
Petersen, P. J., and Co.
Prosser, Taylor and Co.
Qualtrough, A. R.
Roberts (Paris, &o.)
Bocke, Tempsitt and Co. (Mel
bourne)
Soul, W. H., and Co.
APPARATUS APPARATUS Bracher and Co. (Antomatio distilling) Clarke, S. (Food Warmer and Bed Tray) MoHugh, B. and E. (Lemon DITTO PLANT [See SYPHONS and ESSUNCES.]
Barnett and Foster
Bratby and Hinchlife

Squeezer)
Orme (Scientifio)
Perken, Son and Rayment
Wedgwood & Sons (Mortars) AMMONIA May and Baker. White, A., and Sons Woolley, Sons and Co.

AGNCIES ABROAD

Australian Drug Co. Cocking and Co. (Japan) Felton, Grimwade and Co.

Dunn and Co. Greeff, E. W., and Co. Morris and Callard (Salte)

Dunn, W. G., and Co. Goodall, Backhouse and Co. BANDAGES

Bailey, W. H., and Son Robinson and Sons Schutze, F., and Co. Seabury and Johnson

BATH GLOVES

Maw, Son and Thompson, S. BEESWAX

Bowdlear, W. H., and Co. BICARB. SODA

Brunner, Mond and Co., Lim. Gaskell, Deacon and Co. Howards and Sone May and Baker BISMUTH, PREP.

Hearon, Squire and Francis Hewlett and Sons Howards and Sons May and Baker Symes and Co. White, Alfred, and Sons

BLOOD MIXTURE Lincoln and Midland Counties Drug Co.

BOTANIC BEER Newhall and Mason

BAKING POWDER BOOKS

Dr. Dobell Hargreaves, Dr. Pritchett, W. E. Whitla, W., M.D.

BOTTLES

Aire and Colder Bottle Co. (Ld.)

Barnett and Foster

Barrett, R. H.

Brathy and Hinohlife

Breffit's (Lim.)

Evans, Sons and Co.

Fitch, W. B., and Co.

Hunt, W. F. (Caps)

Isaacs and Co.

Kilner Bros.

Lang, Jonas, and Co.

Lang, Jules, and Co.

Maw, Son and Thompson

Poths, H., and Co.

Sanders, H. G., and Son

Shirley, A. W.

Toogood

BRUSHES

Bailey, C. J., and Co. Dukas and Co. Goad and Co. (Tooth) Sutton, O., and Co. (Tooth)

BUTTER COLR, &c. Oldfield, Pattinson and Co. Tomlinson and Hayward

BOXES

Austin and Co. (Cardboard)
Ayrton and Sounders
Chaimers, W.S.
Janneke, E.
Noakes, B., and Co.
Cwen, J., Jr
Parmenter, I. W. & Co. Lim.
Eobinson and Sons

CAMPHOR

Howards and Sone Keene and Ashwell (Homoo-May and Baker [pathic

CARMINE Bush, W. J., and Co.

CSCRA SAGRADA Duncan, Flockhart and Co. Evans, Sons and Co. Ferris and Co. Moss, J., and Co. Squire and Sons

CAPSULES

Denonal, J. (Medicinal)
Dnncan, Flockhart and Go
Evans, Sons and Co.
Hooper, B., and Co.
Maw, S., Son and Thompson
Eobertson, J., and Co.

CAPSULES

(METALLIC)
Betts and Co.
Melin, C. (Machina)
Sanders, H. G., and Son

CATALOGUE

Maw, Son and Thompson, S. May, Roberts and Co. Sanger and Son CEMENT

Foulkes, W. J. Kay Bros., Lim. CHALK PRECIP.

Dunn and Co. Levermore, Aug., and Co. White, A., and Sons.

CHEMICALS

Andreae. Oscar and Co. Bramwell and Son Brunner, Mond and Co., Lim. Busb, W., Son and Co. Dunn and Co. Fletcher Fletcher and Ste-

Dunn and Co.
Fletcher Fletcher and Stevenson
Fuerst Bros.
Gaskell, Deacon and Co. (Bicarbonate of Soda)
Goodall, Backhouse and Co.
Greeff and Co.
Hill. A. S., and Son
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
Lotthouse and Saltmer
May and Baker
Morris and Co.
Howards and Son
Stern G.
Fronk, Davis and Co.
Stern G.
Fronk, Davis and Co.
Stern G.
Fronk, Barband G.
Fronk, Barband G.
Fronk, Davis and Co.
Stern G.
Howard King.
White, A., and Sons
Jimmermann, A. and M.
CHEST PROTCTRS
Hockin, Wilson and Co.

Hockin, Wilson and Co. Maw, Son & Thompson, S. Sanger and Sons Solport Bros. Schutze, F., and Co. Wood, V.

CHL, OF POTASH Burroughs, Wellcome and Co. Hooper, B., and Co.

CHLRIDE OF LIME Government Sanitary Co. National Chemical Co.

CHLRIDE OF GOLD

CHLORODYNE

Davenport (Browne's) Freeman, R. Towle, A. P., and Son CHLOROFORM. &c.

Duncan, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umnsy
Zimmermann, A., and Son
CITRIC ACID

Hassalls (Phospho)

COCAINE-HYDRO. Howards and Sons

COCA WINE

Armbrecht, Nelson and Co. Evans, Sons and Co. French Hygienic Soc.

COCOA & CHOCLTE

Cadbury Bros Fry and Sons Rowntree and Co. Scheibler Bros. and Co. Van Houten's Cocoa

COD-LIVER OIL

Brekke and Howlid
Burroughs, Weilcome and Co
Evans, Sons and Co.
Hill, A. S., and Son
Jensen, J., and Co. (Limited)
Lothouse and Saltmer
North Medicine Co.
Oppenbeimer Bros. and Co.
Smith, T. J.
Woolley, Sons and Co.
Wright, Layman and Umney
COFFEE

Symington and Co. (Coffee Essence)

COLPSIBLE TURES

Betts and Co. Brooks. Peel and Co. Sanders, H. G., & Son COMPRESSED

MEDICINES

Allen and Hanburye Blyton, T. Bage, and Co. Burroughs, Weilcome and Co Hooper, B., and Co. Leo and Co. Martindale, W. Wyleys and Co.

CONFECTIONERY

Blyton, T. Bage, and Co. Ocpal Varnish Co. (Colours) Gibson, E., and Sons Kerfoot, T. Pascall, J. Warrick Brothers

CONCENTRATED LIQUORS

Fvans, Sons and Co. Fletcher, Fistcher & Steven-

CORN CURES

Maw, Son and Thompson, S. Robinson, B. Seabury & Johnson (Plasters) Thompson, M. F. Young, H.

COTTON WOOL

Haynes, G., & Co. (Absorbent) Robinson and Sons (Absrbnt.) Sanger, J., and Sons Seabury and Johnson

CRSHD LINSEED

Mumford, G. S.

DENTIFRICES Jewebury and Brown Maw, Son and Thompeon, 8. Newbery snd Sons Sutton, O., and Co. Thompson and Capper Woods, W. (Areca Nut)

DISINFECTANTS

Government Sanitary Co. Hamilton and Co. Jeyes' Sanitary Compounds National Chemical Co. Seabury and Johnson Sanitas Co.

DISINTEGRATORS

DOG MEDICINES DRUGGISTS' SUM

Ayrton and Saunders
Barclay and Sons (Limited)
Evans, Lescher and Webb
Evans, Lescher and Webb
Evans, Sons, and Co. (Savars)
Goad and Co.
Hill, A. S. and Son
Hockin, Wilson and Co
Idris and Co.
Kay Bros. Lim.
Lynch and Co.
Marriot, E., and Co.
Maw, Son and Thompson, S.
May, Roberts and Co.
Sanger and Sons
Thompson Walters, Hole
and Co.
Toogood, W.
Warren, A. and J.
Wood, Vincent
DRUMS, CANS, &c.
Noakes and Co.

Noakes and Co. DYES

Pronk, Davis and Co.

Farina, J. M. Shirley, A. W. EFFERVESCENT

Allen and Hanbury ELECTRIC APPAR

Berry, F. H. Darton, F., and Co. Gent and Co. Orme and Co.

EMBROCATION

Clarkson and Co. Elliman, Sons and Co. ENEMAS Bailey, W. H., and Son Ingram and Son Maw, Son and Thompson, S, Sanger and Son Schutze, F., and Co.

ENGRAVERS

Barker, W., and Son Corsan, J. R. (Glass Harris, A. J. (Glass)

ESSENTIAL OILS

BSENTITE ULLS
Boohm, F.
Cocking (Japan Peppsrmint)
Cummock, J.
Duckworth and Co.
Evans, Sons and Co.
May and Baker
Stevenson and Howell
Symes and Co.
Treatt, R. C.
Warrick Brothers
Wright, Layman and Umney
ETHEER

ETHER

Duncan, Flockhart and Co.
(Chloric)
Howards and Son
May and Baker
Robbins
White, A., and Sons
Woolley, Sons and Co.
Wright, Layman and Umney

ESSENCES, FRUIT AND SOLUBLE

Beckett, W.
Beckett, W.
Brathy and Hinchhiffe
Burreoyne, Rurbidges and Co.
Burreoyne, Rurbidges and Co.
Burreoyne, Rurbidges
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Backer
Oldfield, Pattinson and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co.
EXTRACCT, MEAT

EXTRACT, MEAT

Anstralian Mest Co. Bovril (Limited) Brand and Co. Denaeyer's Peptone Co. Liebig Co.

EXTRACTS, FLUID INK [See MARKING]

ATRACTS, FIGURE
Allen and Hanburys
Barber, G., and Co.
Burgoyne, Burbidges and Co.
Evans, Sons and Co.
Fietcher, Fietcher&Stevenson
Hearon, Squire and Francis
Hooper, B., & Oo.
Oldfield. Pattison and Co.
Potter and Clarke
Wright, Layman and Umney

FLESH GLOVES Solport Bros.

FEEDING BOTTLS

EEEDING BOTTLS
Breffits, E. and Co., Lim.
Evans, Sons and Co.
Hearn, E. A., and Co.
Hockin, Wilson and Co.
Kilner Bros.
Maw, Son and Thompson, S.
Marriot, E., and Co.
May, Roberts and Co.
Thompson, Walters, Hole and
Co. (L'mited)
Togood, W.

FLY PAPERS

Ford, Shanland and Co. Mather, W. Tunbridge and Wright Wilson & Co.

FILTERING

Andrews, R. W. Mawson, Swan and Weddell Silicated Carbon Filtsr Co.

FOOD (Infants'& Invalids') Allen and Hanburys
Benger's Pancreatised
Bovril (Limited)
Brand and Co.
Dahl's Dysepsia Cakes
Goodall, Backbouse and Co.
Hearon, Squre (Matted)
Liebig Co. Mottershead & Co. (Benger's Nestle, H. Food) Ridge, Dr.

FORMULE

Brooks, T GINGER ALB

Hay, W. (Essence) Kinmond and Co. Mills, R. M.

CLYCERINE

Fink and Co. Price's Candle Co. Van Geelkerken and Co.

GRANULAR PREP.

Burroughs, Wellcome and Co. Curtis and Co. Evans, Sons and Co. Hearon, Squire and Francis Hill, A. S., and Son Kerfoot, T. Wright, Layman and Umney

GUM

Fink (Arabis, &c.) Knight and Co. Levermore Aug., and Co. Pronk, Davis and Co.

GUTTAPERCHA

Duncan, Flockhart and Co.

HAIR PREP.

Bates, F. W. Brodie, J. (Imperial Hair Dye) Chesebrough Mnfg. Co.

HERB BEER EXTS

Newball and Mason Oldfield, Pattinson and Co. Potter and Clarke

HERBALISTS

Butler, McCulloch and Co. Newball and Mason (Extract of Herbs) Potter and Clarke (Extract of Herbs)
Wilkinson, A., and Sons(Compressed Hops)
HOMEOPATHIO

Epps, J., and Co. Gould, E. and Son Keene and Ashwell Leath and Ross Thompson and Capper Watson and Wates

HOPS

Wilkinson, A., and Sons HOP ALEESSENCE Hav. W

HOSPITALS Bolingbroke House London Homœopathic

HYPOPHOSPHITES Duncas, Flockhart and Co. Dunn and Co. Fellowe Fletcher, Fletcher and Co. Symes and Co. Typke and King

INHALERS

Anderson and Ads ms
Evans Sons and Co.
Godfrey and Cooke
Maw, Son s nd Thompson, S.
Toogood, W.

INSECTICIDES

Maw, Son and Thompson, S. Sanfora Sherey, J. F. Steiner and Co. Vogt, G.

Bewley and Draper Duncan, Flockbart

KETCHUP

Tyrer, P.

TARD. Ewen J.

LEECHES Fitch and Nottingham Potter and Clarke

LIME JUICE

Evans, Sons and Co. Idris and Co. Hockin, Wilson & Co. Southwell, C., and Co,

LINT

Liverpool Lint Co. Maw, Son and Thompson, S. Newsome, C. Bobinson and Sons Seabury and Johnson LOZENGES Allen and Hanburys
Blyton, T. Bage, and Co.
Gibson, R., and Sons (Manfrs.)
Hill and Son
Kerfoot, T.
Martindale, W.
Pascall, J.

Raimes and Co. Warrick Bros. MACHINERY Burroughs, Wellsome and Co. Carter, J. H. Goodall, E. F. Holroyd & Co. (Limited) McFerran, J. A. Melin, C. (Capsuling) Werner and Pfielderer

MAGNESIA

Andreae, Oscar, and Co.
Banner, E. E. (Citrate)
Dinneford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Hockin, Wilson & Co. (Citrate)
Kerfoot, T. (Citrate)
Murray, Sir James, and Son
Southwell, C., and Co.

MALT EXTRCT, &c.

Burroughs, Wellcome and Co. (Kepler's) Hearon, Souire and Francis Oppenheimer Bros. and Co.

MARKING INKS

Barber, G., and Co. (Crimson) Hickisson, J. MEDICINE CHSTS

Day, Son and Hewitt (Veterinary) Day and Sons (Veterinary)

MENTHOL A1 Menthol Depot, A. W. Shirley, Proprietor Cocking and Co. Hockin, Wilson and Co. Maw, Son and Thompson, S. Shirley, A. W.

MERCURIALS

Howards and Sons May and Baker

METHYLATED SPIRITS Burrough, J. Harvey, J. & W., and Co. Jones and Co. Phillipt, G., and Co.

METHYLENE Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co. Perken, Son and Kayment MILK

Nestle, H. (Condensed) Swiss Milk Co.

MIXING MACHINERY

Bracher and Co. Carter, J. H. Werner and Pfielderer

MORPHIA Macfarlan, J. F., and Co. Smith, T. and H.

MUSTARD

Banner, E. R. (Oil) Johnson, J. H. and S. (Ess. Oil)

OILS, PAINTS, &c.

Colthurst and Harding Gregory, W. (Devonshire Oils) Pronk, Davis and Co. OPTICIANS

Darton, F., and Co. Raphael, J., and Co.

OINTMENT BASES Albert and Co. Burroughs, Wellcome and Co. Chesebrough (Vaseline) Green, S. (Singleton's Eye) Grindley (Petroleum Jelly)

PAPAIN FINELER Knhn, B. PARALDEHYDE

Zimmermann, A. and M.

PATENT MEDCHS

Alofa Co.
Albert and Co.
Albert and Co.
Armbrecht, Netson and Co.
Albert and Co.
Barclay and Sons (Limited)
Beecham (Pills)
Beecdzler, J., and Co.
Clarkson and Co.
Clarkson and Co.
Crouch, F. B. (Waters)
Bedzler, J., and Co.
Clarkson and Co.
Forening's (Powders)
Fortescue & Co.
Goodall, Backhouse and Co.
Holloway (Pills and Oint.)
Kemp, W.
Laior (Pho hodyne, &c.)
Laior (Pho hodyne, &c.)
Halor (Pho hodyne, &c.)
Mason, W.
B.
May, Roberts and Co.
Newbery and Sone.
Oil of Olivet Co.
Poingdestre and Truman
Powell, A. E. and Uo. (aconseed Bitters)
Boberts and Co. (Foreign)
Sequah (Limited)
Singleton's live Ointment
Stedman, J. (Teething Pwdrs)
Switt's Specific Co.
Wilson, A. (Bunter's Nervine)

PEPPERMINT OIL Cocking and Co.

PEPSINE, &c.
Burroughs, Wellcome and Co.
Claridge and Co.
Fletcher, Fletchsr&Stevenson
Newbery (Ingluvin)
Warner and Co. (Ingluvin)
Zimmermann

PERFUMERY. FANCY SOAPS

FANCY SOAPS
Blondeau and Co.
Brecknell, Turner and Sone
Burroughs, Wellcome and Co.
Chesebrough Mautetring Co.
Chiswick Soap Co.
Cook, E., & Co.
Durrant, Geo.
Ewen (Soaps)
Farina, J. M.
Foulkes, W. J.
Gelston, P., and Co.
Girand Flie
Greensul, f. S., and Son
Mack, H.
Mann, C. A., and Co.
Maw, Son and Inompson
Newbery and Sons (Berdoes')
Oftinger, E.
Fours Son
Fuers Son
Freat, R.
Fuers Son
Freat, R.
Fuers Son
Fuers
Fuers Wedlake, M. West, T. (Okell's Mona) Woolley, Sons & Co. (Powder)

PEROX. OF HYDR.

Dunn and Co. Robbins and Co.

PHARM. PREPS.
Allen and Hanburys
Barron, Squire and Co.
Becker and Kirsten
Billauli
Boehm, F.
Brady and Martin
Burgoyne, Burbidges
Burrougns, Wellcome & Co.
Chanteaud, G.
Chanteaud, G.
Chassaing and Co.
Duncan, Flockhart and Co.
Ferris and Co.
Ferris and Co.
Fletcher (Ldrs. for Syrups)
Frierst Bross.
Greeff, B. W., and Co.
Hearon, Squire and Fransis
Hewlett and Son
Hull, A. S., and Son
Hooper, B., and Co.
Howarde and Sons
Keith (Conc. Finctures)
May and Baker (Phenacetine),
Roberts and Co.
White, Altred, and Sons
Willows, Francis and Butler
Woolley, Sons and Co.
Wyleys (Various)
PHOTOGERAPHIC PHARM. PREPS.

PHOTOGRAPHIC

Howards and Grey
Howards and Son (Chemicals),
Fry and Co. (Limited)
May and Baker
Marion and Co.
White, Alfred, and Sons

PLASTERS

Cooper and Co.
Johnson and Johnson
Mather, W.
Maw, Son and Thompson,
Quilliam J., and Co.
St. Dalmas, A. De.
Seabury and Johnson
Smith, W. F.
Thompson, M. F.
Young, L.

PATENT AGENTS Horn and Son

PILLS (Coated, &c.) Allsa and Hasburys
Beecham, Thomas
Blair's Gout Pills
Evans, Sons and Co.
Hooper, Dr.
Holloways
McKesson and Robbins
Newbery and Sons
Sanger, J., and Sons
Smith, W. F.
Warner, W. K. (Coatsd)
Wylsys and Co.

PILL MACHINES Robertson, J., & Co. (Coating) Toogood, W. (Coater)

PINE PRODUCTS Burroughs, Wellcome and Co. Stern, G. and G.

PODOPHYLLIN, &c. Ksith, B., and Co Smlth, T. and H.

PORCELAINGOODS Toogood, (E.c. Pots, regist.) POLISHING

Bradlsy & Bourdas (Albatum) Oakey, John. and Sons Griffiths, T. M.

PRINTING

Bowers Bros. Oyclostyle Co. Davis, J., and Co. (Limited) Ford, Shapland and Co. Silverlock, H. Townsend, J. (Exeter) 'Zuccato and Wolff PUMILINE

Stern, G. and G. QUININE SALTS

Andreae, Oscar, and Co. Howards and Sons Knhn, B. Zimmermann and Co. RECIPES

Brooks, T. RENNET

Dnncan, Flockhart and Co. Oldfield, Pattinson and Co. SACCHARIN

Allen'and Hanburys Burroughs. Wellcome and Co.

SALICIN Macfarlan and Co. Smith, T. and H., and Co.

Knhn, B.

SAUCES, PICKLES SPECTACLES Goodall, Backhouse and Co. Tyrer, P.

SCHOOLS, &c.

Bolingbrooke Houss
Central School of Chemistry
and Pharmacy
City School of Chemistry and
Pharmacy (Lim.)
Livarnool School Fharmacy (Lim.)
Liverpool School
London Homosopathis and
Medical School
Manchester College
South London School of
Pharmacy, Lim.
The School of Pharmacy
Westminster College

SELTZOGENES Bratby and Hinchliffe Evans, Sone and Co. Fevre, T. Geraut, E. and Co. Idris and Co. May, Roberts and Co.

SHAVING Hovenden and Sons Lloyd's, Mre., Euxssis SHEEP DIP

Cooper and Nephews Bigg, T. Fletcher, Broe. and Co. Grindley and Co. Hamilton and Co. Quibell Bros. Tomlinson and Hayward

SHOP FITTERS BOWING and Govier Bygrave, J. and W. Corsan, J. R. Evans, Sons and Co. Harris, A. J. Howlett, S. Natall, E. (Show Cases) Poths, H., and Co. Treble, G., and Son Yates, W. S.

SOAP Chiswick Soap Co. Cook, E., and Co. Pears' Soap

SPIRIT Boord and Son
Burrough (Pure and Methyl.)
Harvey, J. W., and Co.
Jones and Co. (Methyl.)
Leslie, J., and Co.
Macnair, A., and Co.
Macnair, J. and D., and Co.
Phillips and Co.
Smith, Stephen and Co.

SPONGE

Maw, Son & Thompson (Bags) Peterson M., and Co.

Botwright and Grey Darton, F., and Co. Raphasi and Co.

STAMPS (RUBBER) Hlckisson, J. Pollard, A. W.

STOPPERS

Austin and Co. (Sprinkisrs)
Barnett and Foster (The
Eolipse)
Sanders, H. G., and Son

STOVES Clark, S. aud Co. SURGICAL

Ayrton and Sannders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cooking, J. T.
Eschmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Maw, Son and Thompson, S.
Milne, J.
Robinson and Sons
Schutze, F., and Co.
Wooley, Sons and Co.
Wood, Vincent

STARCH Critchley (Gloss)

SUGAR Gibson, R., and Sons

SULFONAL

Burroughs, Wellcome and Co. Greeff, R. W., and Co. May and Baksr

SYPHONS Barnett and Foster Bratby and Hinchliffe Favarger and Co. Fevre, T. Gueret, E., and Co. Kliner Bros. Lang, Jules, and Co. Melin, C.

SYRUPS Fletcher, Fletcher (Liquors) Idris and Co. Southwell, C., and Co.

TARTARIC ACID

Andreae, Oscar and Co. Greeff, R. W., and Co. TEETHING PADS Marriot, E., and Co

TIN CANISTERS Noakes, B., and Co.

Cars, Johnson and Co, French and Langdais Gt. Tower St. Tea Co. Heseltine, Wm., and Son Santha Tea Unted Kingdom Tsa Ct. (Ld.) Walker and Dalrympls

THERMOMETERS

Berry, F. H. Darton, F., and Co. Hagus, J. J,

TOBACCO-

CIGARETTES Peaccck, M. & R.

TOILET

Albucar Paper Co. (paper)
Foulkes, W. J.
Foulkes, W. J.
Hopgood and Co.
Mack, H.
Mumford, G. S.
Parisian Vapouriser Co.
Sanitary Paper Co.
Travado, S., and Co.
Vigis, L.

TOOTH PASTE

Jewsbury and Brown Maw, Son and Thompson, S. Sutton, O., and Co. (Block) Wilson, A. (Bunter's) Woods, M. (Areca)

TRADE MARKS Horn and Son

TRUSSES

Bailey, W. H., and Son Haywood, J. H. TYPE-WRITING

Pollard, A. W. URETHANE Howards and Sons

VACCINATION

Renner, Dr. (Vaccine Lymph) Vaccine Association (Lymph) VALUEES AND

TRNSFR. AGNTS Baker, P. C. Brett, F. J. Crocker, G. B. Orridge and Co. Tomlinson, T., and Son

VERMIN KILLERS

Battle, J. R. Sanford and Son Steiner and Co.

VASELINE

Chessbrough Mnufetring Co.

VETERINARY

Bigg, T.
Day and Sons
Day, Son and Hawitt
Down, H., and Co.
Elliman, Sons and Go.
Gregory, W. (Devonshirs Oils
James, W. H. (Blister)
Rumney's Food for Hortes
Spratts (Dogs)
Sutton, F., and Co.
Wyleys and Co.
Wyleys and Co.

WHOLESALB AND EXPORT DRUGGISTS

DRUGGISTS

Allen and Hanburys
Barron, Harvsys and Co.
Brothers, J. and Co.
Brothers, J. and Co.
Burgoyne, Burbidges and Co.
Clay, Dod and Co.
Evans, Sons and Co.
Evans, Sons and Co.
Evans, Leacher and Webb
Evans and Sons (Limited)
Ferris and Co.
Goodall, Backhonse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Kernick & Son
Kernick & Son
Kernick & Son
Lotthcuse and Saltmer
Macfarlan, J. P., and Co.
Otter & Toure and Co.
Cotter & Toure and Co.
Cotter & Toure & Co.
Symes and Co.
Thompson and Capper
Walker, Troke and Co.
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
Willows, Francis, and Butler
Woolley, Jas., Sons and Co.
Wirtht, Layman and Umnsy
Wyleys and Co.

WINES, SPIRITS

Boord and Son Coleman and Co. (Meat and) Malt) Malt)
Durrant, G. (Orange)
Goodall, Backhouse and CoHarvey, J. and W., and Co.
Iuris & Co.
Iuris & Co.
Ingram and Royle
Jones and Co.
Millar, A., and Co.
Phillips, G., and Co.
Phillips, G., and Co.
Robinson, B. (Orange, Beef
Wine)

Smith, S., and Co. (S.V.R.)

BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBERY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

SESS. ROUQUET

BERDOE ET CIE

BERDOE'S TRIPLE

In PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz. CUBERY & SON Ess. Bouquet Frangipane 0 8 7 per 20 oz., Jasmin Jockey Club Millefleurs New Mown Hay :: per 10 oz., 0 4 New Mow... Opoponax ... Patchouli 0 2 3 CXTRAIT TRIPLE per 5 oz., Stephanotis Ylang Ylang A CRASSE

The above are the leading Essences, and to these the special attenof oustomers is asked. Those who desire greater variety will find in "Newbery's Catalogue" a more extended list.

F. NEWBERY & SONS, 1 & 3 KING EDWARD STREET, LONDON, E.C.

FRENCH ESSENCES.

0 11 0 0 4 4 0 2 3 0 1 2 per 20 oz., Eau de Cologne Lavender Water " 10 " " 5 "

Berdoe's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

Established A.D. 1746.

£ s. d.

Perfumes.

Quality comes first, and sweetness determines Style has its place, but value depends on what's inside. Gilded labels and poetic names are well for their beauty, but they add nothing to the rich mellow fragrance of the flower. They are generally minus the flower. Inferior perfumes are a delusion. They are sometimes offered on the score of cheapness, but are dear at any price. They are positively objectionable to many. The flutter of a perfumed handkerchief should call up a hundred sweet associations. A few drops of good perfumery surrounds one with a halo of living individuality and refinement. Nothing is easier than learning to choose a good perfume. Sweetness is the most important feature. Then it should be fine-grained, soft, and free from Alcoholic sharpness. This is the Perfumer's art. We make chiefly well-known odours, some of which are:

White Rose
Lily of the Valley
New Mown Hay
Ylang Ylang
Frangipanni
Jockey Club
Heliotrope

Violet. Moss Rose

Stephanotis
Prairie Flower
White Lilac
Wild Lotus
Sweet Briar
Carnation Pink



2-oz. size.

PUT UP IN GLASS-STOPPERED BOTTLES, AS FOLLOWS:-

$\frac{1}{2}$	Oun	e Size	(Styl	e of	Illustr	atio	n)			•••	per	gross	\$30 0	0
$\frac{3}{4}$,	,	"		,,			•••	•••	•••		19	42.0	0
1			,,		"			•••	•••			,,	48.0	0
$1\frac{1}{2}$,	,,		,,			•••				"	72.0	0
2	,	,	,,		99			•••	•••			59	96.0	0
4		,	19		,,,			• • •	•••	•••		,,	144.0	0
8		,	99		39			•••	•••	•••		,,	288.0	0
1	lb. (8 Flu	id Ou	nces)	,,			•••	•••	•••	per	dozen	48.0	0
		ONE DO	ZEN IN	N BOX	EITHER	IN S	SINGLE	OR	ASSORTED	ODO	JRS, A	S REQUIRE	D.	

Additional information and Illustrated Catalogue furnished upon application.

C. A. MANN & CO.

48 MURRAY STREET, NEW YORK, U.S.A.

The Malt Question.

LONDON.

JULY 6TH.

[1889.

Facta non Verba.

There are a few things which we have emphasized from time to time, viz.:-

1. That it is a grave mistake, in making Extract of Malt, to substitute inferior malting cereals, like wheat and oats, for barley.

2. That all scientific chemists and all maltsters are unanimous in the condemnation of wheat and oats for malting. (This is the outcome of ages of experience.)

3. That all scientific authorities and maltsters are agreed as to the incomparably superior malting pro-

perties of barley.

4. That to compare the alleged diastasic activity of cerealin and gluten in wheat to malt-diastase is, upon the face of it, an exemplification of Zeno's reductio ad absurdum method.

5. That the fact that barley is the only grain suitable for malting is let severely alone, and sub-

sidiary issues are introduced.

6. That in the abundance of digestive principles (diastase, &c.), which renders the starch and nitrogenous matters in barley soluble, this grain has no known equal in the vegetable kingdom.

7. That the proportion of carbo-hydrates in oats (55.43) and wheat (67.89) could not compare with that in barley, which is 82.2. (Note.—When those who substitute wheat and oats for two-thirds of the barley claim an average of over 80 of carbo-hydrates of course we know how to value their figures.)

8. That in nitrogenous matters, barley, according to all rational estimates, leads the way. The proportion in barley is 12.1 and in a mixture of wheat and oats" 12.075 (Composed with figures from Blyth). Note.—Naturally enough, quotations of 17 to 30 are

made for the purpose of misleading).

9. That wheat not only falls far below barley in carbo-hydrates, but is "deficient in fat and in vegetable salts which may form carbonates in the system" (Parkes). "Barley contains rather more protean bodies than wheat" (Ibid).

10. That barley contains a larger proportion than any other cereal of soluble albuminoids and of soluble phosphates, both of these substances preserving a

constant relation."

MUSPRATT ON BARLEY FOR MALTING.

Quotations from Muspratt have been lately adduced to show how much better is a "wheat and oats" malt than the Kepler Malt Extract of Pure Barley Malt. We hardly think they will be made any more, but if they are they should be read side by side with the following. Here is what Muspratt really says :-- "Any of the cereals may be employed in the preparation of malt, but barley is preferred for

this purpose, because experience has demonstrated that it contains the largest percentage of diastase."

THE VERDICT FOR KEPLER.

- "It is the best known" (Lancet)
 "It is by far the best" (Medical Times & Gazette).
 "It is undoubtedly the best" (Med. Record).
 "It is delicious to the taste" (Medical Press).

Best Form for giving Cod Liver Oil.

There are a few things in connection with cod liver oil, for which the fair and impartial will cheerfully award us the credit of originality. They

1. Having first pointed out that cod liver oil should be given (physiologically) with another food, the same

as fat-food is always taken at meals.

2. Greater than all—having discovered a process for dissolving a pure cod liver oil in a properly prepared extract of malt rich in digestive ferments, the outcome of the procedure being the Kepler Solution.

3. The production of the only practically tasteless preparation of oil which does not sour the mouth

after being taken.

Of the multitudinous preparations of cod liver oil, the Kepler Solution is the one manufactured on truly physiological lines. This food combination exerts a demulcent action upon the throat, and reflexly soother the larynx, &c., in sore throat, or coughs and colds. In taking it, oil is no more traceable than when milk is drunk—and who thinks of the butter when drinking milk? By so intimately incorporating the molecules of the oil with those of the Kepler Extract that a solution is produced, a delicate stomach is saved from the derangement caused by cod liver oil in other forms, and by ordinary fats and oils. Thus by the demulcent action, as well as the digestive activity of the product, the stomach itself is toned, and digestion improved. With the improved digestion fuller ingestion of food and a better assimilation follow, consequent upon which we find an altered state of nutrition and increased weight. With greater efficiency than ever, the oil (when dissolved) imparts vital stability to the feeble degenerated cells appearing in the bronchi and elsewhere. Its alterative power is greatly enhanced by the malt, thus bringing about a new and improved condition of nutrition, affecting all the parts of the body, so that from consumption, scrofula, and wasting on the one hand, to rheumatism, Bright's disease, and chronic intestinal and skin troubles on the other, we find it constitutes the basis of many varied lines of therapeutic and dietetic procedure.

Kepler Extract of Malt and Kepler Extract of Malt with Cod Liver Oil (Kepler Solution) supplied to the Trade in bottles, containing $\frac{3}{4}$ lb. and $1\frac{1}{2}$ lb. Retail prices, 2s. 6d. and 4s. Special terms to Hospitals. Supplied by all Chemists.

BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.

PARIS EXHIBITION, 1889.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C., have pleasure in stating that they will be most happy to send, gratis, to any Pharmacist who may desire to possess it, a copy of

"BEMROSE'S GUIDE TO PARIS AND THE EXHIBITION,"

which has been acknowledged by the press to be one of the very best of the kind.

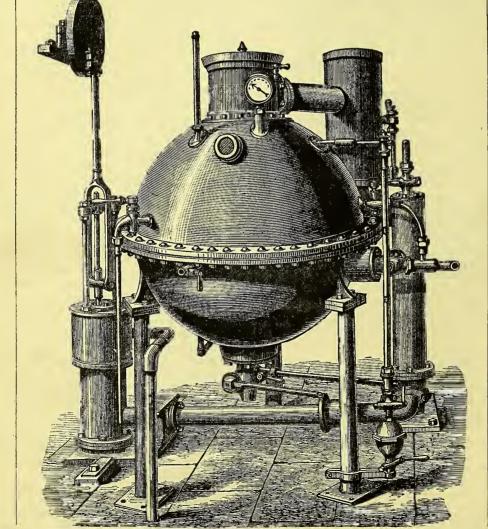
The Guide, we may mention, contains a photographic reproduction of our Exhibit in the British Chemical Section, and members of the Trade will find it worth their while to place it upon their counter, or in some other place where it can be inspected by customers.

HEARON, SQUIRE & FRANCIS,

ANALYTICAL AND MANUFACTURING CHEMISTS,

WHOLESALE AND EXPORT DRUGGISTS.

ESTABLISHED AT 95 BISHOPSGATE STREET, 1714.



EVAPORATION OF PHARMACEUTICAL PREPARATIONS CONDUCTED IN VACUO

5 COLEMAN ST., LONDON.



PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.O.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and orossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:-

The Pharmaceutical Society of New South Wales. The Midland Fharmaceutical Association of New

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association. South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Titeraru Confents.

PAGE Editorial Notes—cont. PAGE
Bankruptoy Report 22 Correspondence: Washing Measures; Dispensing Conveniences; Decomposition of Chlorates, &c. 28 Blaud's Pills; Bemrose's Guide to Paris; The Patent Medicinc Track, &c. 29 Dispensing Notes 30 Legal Queries 30 Miscellaneous Inquiries 31 Cricket 22 Deaths 10 Editorial Notes:— French Pharmaceutical Manufactures 10 Editorial Notes:— French Pharmaceutical News 19 Gazette 22 Marriages 10 Paris Pharmaceutical Society 10 Paris Pharmaceutical Society of Great Britain: Council Meeting 5 North British Branch 8 North British Branch 8 Royal Agricultural Society's Exhibition 20 Exhibition 20 Exhibition 20 Track Notes 23 Track Notes 23 Track Report 23

PUBLISHER'S NOTICE.—Wholesale manufacturing firms are advised that our usual summer number will be issued on July 27. It will be exceptional in point of style, and as mearly perfect in respect of circulation to British and Colonial druggists as our lengthy experience can make it. We shall be glad to make early arrangements for advertisements in this important issue, and recommend the opportunity (which will not recur this year) for the insertion and distribution of trade-lists and circulars in the most economical and effective manner.

WE have pleasure in announcing to Continental subscribers that henceforth, by arrangement with the post offices of the various countries, subscriptions to THE CHEMIST AND DRUGGIST can be paid at any post office in Austria-Hungary, Belgium, Denmark, Germany, Holland, Norway, Russia, and Sweden at our rates, namely 10s. per annum including postal delivery to subscribers in any of those countries. Subscriptions may date from the first issue of any month.

NEW OFFICE AT SYDNEY, N.S.W.—Our Australian staff have found it necessary to take an office at Sydney, N.S.W. This is situated at 13 Queen's Chambers, Barrack Street.

A MEMBER of our Melbourne staff is again with us at 42 Cannon Street, and will be glad to discuss Australian business with any firms who may think his special knowledge might be useful to them.

"THE HANDY BOOK OF MEDICINE-STAMP DUTY."

THIS work has been written for us by Mr. E. N. Alpe, of the Solicitors' Department, Inland Revenue Office, Somerset House, who has had a wide experience in and intimate knowledge of the administration of the Acts which regulate the sale of proprietary medicines. The Handy Book is, consequently, of exceptional value to chemists and druggists, more especially in showing how medicines are made liable to stamp-duty by labelling, circulars, and the like. Reviewers have been unanimous in stating that the work is not only complete, but interesting and invaluable. It is as free as possible from legal phraseology, is readable, and is nicely got up. Price 2s. 6d., or by post 2s. 9d. May be obtained through the wholesale houses in the same way as "The Art of Dispensing."

"THE ART OF DISPENSING."

Price 3s. 6d., or by post 3s. 10d. May be ordered along. with ordinary goods from the principal wholesale houses, who supply it at the published price, 3s. 6d.

This book may be obtained in Australia from the offices of

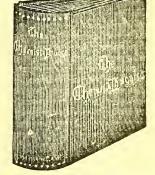
The Chemist and Druggist of Australasia, Normanby Chambers, Melbourne, and 13 Queen's Chambers, Sydney, price 5s.

Our agent in New York, Mr. Harry V. Dakers, 45 Liberty Street, will supply "The Art of Dispensing" to American pharmacists at \$1.25 per copy, post free.

"The Art of Dispensing" may be obtained from Evans and Sons (Limited), Montreal, at \$1.25 per copy; B. G. Lennon

& Co., East London and Port Elizabeth; Lennon & Tebb. Cape Town; and Bertie-Smith & Co., Bombay, at 5s. per

THE reading cases which we offer to subscribers are now used by a very large number of chemists, and are found very convenient. They keep together thirteen numbers in very tidy form, always ready for reference. By having two cases in hand the numbers of a complete volume are always available until the time comes for binding. sell these cases at the office for 1s., or by parcels post 1s. 3d., or two for 2s. 3d. We cannot forward them to any house for en-



closure, nor by any of the carriers, as in the latter case we have to pay for booking.

THE CHEMIST AND DRUGGIST OF AUSTRALASIA, published monthly at our Melbourne office, can be supplied to subscribers outside Australasia at 5s. per annum, payable in advance, and commencing at any date. Chemists interested in the drug trade and the pharmaceutical affairs of the Australasian Colonies will find a full record of all events affecting their occupation in *The Chemist and Druggist of Australasia*. Single copies can be supplied at 6d. each. Application should be made by English or American subscribers to the office at 42 Cannon Street, London.

Probincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

LIVERPOOL.

AMALGAMATION OF BOTTLE MANUFACTURERS.—It is stated here on good authority that the Lancashire makers are at last giving way, and that the "Bottle Syndicate" is almost an accomplished fact. Definite contracts have been entered into by the majority of manufacturers throughout the country, and a letter which has come under our notice shows that efforts are being made to render the combination as inclusive as possible. It is rumoured that the prospectus is now nearly ready for issue, that the capital is to be 2,000,000*l*, and that a large portion of the amount is already subscribed. Probably when the price of bottles goes up the workmen will require a higher rate of payment.

AN EXTENSIVE PURCHASE.—Dr. Rickersteth, who inherited and has well maintained the reputation of an eminent surgeon, has just purchased an estate of ninety acres in the island of Anglesea. It comprises a mansion and grounds with over eight miles of walks, and one of the finest yachting stations in the kingdom. This and several adjoining smaller properties purchased by the doctor at the same time cost a total of little less than 30,000%.

Tonquin Beans.—Large quantities of these were formerly imported into Liverpool, but none have arrived for some months past. It is a curious fact that when some years ago artificial coumarin or vanillin was introduced Tonquin beans were abundant, vanilla was cheap, and it was thought that soon there would be no market for either. Now both are scarce and dear, leading to the inference that either the artificial product has not met with the anticipated success, or that the demand for this flavour has considerably increased.

REPORT OF THE MEDICAL OFFICER OF HEALTH.-The annual report of this official for the second city of the Empire is of both local and general interest. The number of deaths during the year dealt with was 12,159, being 1,849 less than in the previous year, and 2,400 below the annual average of the last decade, without taking into consideration the great increase of population during that time. The rate for the year was 203 per 1,000, or 33 lower than the previous year, or 56 less than the average for the last ten years. This is the more extraordinary when it is considered that there are 115 persons per acre—a density of population as great or greater than in any other city of Great Britain. Zymotic diseases caused the death of 1,796 persons, or 14.8 per cent. of the whole, whilst the average number of deaths from such causes during the decade was 2,833, thus showing a very marked improvement. The change for the better is no doubt attributable to a combination of causes, such as the advances in the science of medicine and pharmacy, the demolition of a large amount of insanitary property, and the removal of the inhabitants to more healthy positions, the constant water-supply, decrease of drunkenness, and improvements in the domestic habits of the people. Should this state of things continue Liverpool will soon lose that undesirable epithet so often applied to it, "The black spot on the Mersey."

MANCHESTER.

OWENS COLLEGE MEDICAL SCHOOL.—The number of students attending the medical classes this year is 380. During last year 57 graduated in medicine at the Victoria University, 24 also taking the London University degree.

ADULTERATION.—In his quarterly report submitted to the Salford Town Council at its meeting on Wednesday Mr. J. Carter Bell, public analyst, reported that amongst the articles he had examined during the quarter were two drugs, one of which he had found to be adulterated. The name of the drug was not given.

IRELAND.

"CONSOLIDATED PERFUME" is the latest thing in newspaper "puffs," the manufacturer of which, in the course of a glowing panegyric upon its wonderful properties, states that a cake will last for years.

THE committee of the Coleraine Union have passed a resolution recommending that the salary of the dispensary officer, Dr. Creery, be increased from 100% to 130% per annum.

SEVERING A PARTNERSHIP.—Messrs. Hugh Moore & Co., wholesale drug merchants, the Linea Hall, Bolton Street, Dublin, are about to lose the co-operation of Mr. Richard Hewitts, one of the partners of the firm.

THE DUBLIN LEPER.—The authorities have at last provided a refuge for the Dublin leper. They have set apart for him a special ward in the House of Industry hospital, where henceforth the patient will be free from further observation.

A MEMORIAL signed by 130 ratepayers of the town of Ballymena was last week received by the Board of Poor Law Guardians, asking the establishment of a branch dispensary in the district of Newtowncrommelin. The matter, it is stated, will receive due attention.

The officials of the Glenties Union will on July 19 elect a dispensary officer for the Carrick district at a salary of 1151. per annum, exclusive of miscellaneous fees. Applications addressed to the hon. sec. will be received up to the date specified.

In response to an application lately issued by the Fermoy Board of Guardians, inviting tenders for the supply of medicines and drugs, a large number of chemists forwarded samples. The tender of Messrs. Harrington & Sons, of Cork, was accepted.

THE town commissioners of Mallow, co. Cork, are taking steps to bring the virtues of the Mallow mineral spa before the public. The waters, which some years ago were renowned for their efficacy, are said to contain such proportions of sulphur, magnesia, and iron as tend, together with the salubrious air, to make the spot a health resort equal to those in the South of France.

New Method of Glass-bottle Blowing.—In Dublin α few days ago an interesting exhibition of glass-bottle blowing was witnessed at the works of Messrs. McEntagert & Percival, Temple Lane. The experiment, which was highly successful, was witnessed by a number of scientific gentlemen. The invention consists of an improved blow-pipe, worked by the arm, thus abolishing the necessity for blowing through the mouth of the operator.

SIR JAMES HASLETT, J.P., while acting last week in his magisterial capacity, stated in connection with a case before the court that he had the strongest objection to band playing in the public streets of Belfast, that the practice was conducive to unlawful assemblies, that bands should not accompany Sunday-school excursions, and that indulgence in the pastime meant the ruin of the people. Music has evidently no charms to soothe the breast of Sir James, and now that the "drumming" season is almost on us, it is feared that the "Williamites" will have a bad time of it.

THE Cork Board of Guardians have been informed that Mr. McSweeny, the apothecary attached to the Central Dispensary district of that city, had been in the habit of having prescriptions made up at Messrs. Scannell's pharmacy, 90 Grand Parade, whenever absent from his duties. A committee was appointed to investigate the affair, and had definite information of the correctness of the statement. A public contradiction, however, cames from Mr. Scannell, who declares that Mr. McSwceney made no such arrangement, nor has he ever paid for medicines supplied to the dispensary patients.

THE LIMERICK POISONING CASE.—Some important evidence was last week given by Mr. Thomas S. Hance, resident apothecary in the Limerick Union workhouse, who deposed to making up a prescription ordered for the man John Manning, whose son-in-law is in custody charged with his murder by poison. The deceased, it appears, had for some time been suffering from lupus cancer, for which poisonous medicine had been supplied for external use, and which it is alleged

was administered internally by the accused. During the course of the investigation Mr. Hance identified a poison lahel as one which he had affixed to a hottle of calomel, and which was supplied to the deceased. Mr. Richard Jackson Moss, analytical chemist to the Royal Chemical Society of Dublin, gave evidence to the effect that the stomach, intestines, &c., of deceased, which he had examined, contained about 34 grains of arsenic. The accused was committed for trial to the assizes, hail being refused.

CHEMISTS AND DRUGGISTS' SOCIETY OF IRELAND.—A meeting of the committee of this Association took place on June 28 at the offices of Messrs. Hugh Moore & Co., Linen Hall, the President (Mr. W. J. M'Neight) occupying the chair. There were also present Messrs. S. P. Boyd, M.A., vice-president; Charles Johnston, hon. treasurer; James Hanson, W. Greenfield, J. Middleton, J. M'Swiney, and J. J. Dowling, hon. secretary. After transacting routine business, electing new memhers, and receiving subscriptions, a deputation from the Belfast Branch arrived, consisting of Messrs. S. Gibson, treasurer; S. Clotworthy, vice-president; J. Shaw, and W. J. Rankin. A letter was read from Sir James Haslett, J.P., president, regretting his inability to he present. A discussion took place in connection with the title "chemist and druggist" from 1875 to 1888. Mr. Shaw said a deputation of Belfast pharmaceutical chemists was ahout to wait upon the Solicitor-General. The following resolution was moved by Mr. Boyd, seconded by Mr. Clotworthy, and unanimously passed:—

That the draft memorial, as framed by Sir James Haslett, be signed by the joint associations and forwarded at once to the Solicitor-General, and that the Bill to be enclosed in the memorial shall be that which was printed by the Pharmaceutical Society, as agreed at conference held on May 15, 1839; but providing that the title of those registered without examination be that of Chemists and Druggists, and those qualified for registration after January, 1883, be registered simply as Druggists; and, further, that Clause 9 of draft Bill, line 11, read "one" year instead of "two."

The following is a copy of the letter to be forwarded to the Solicitor-General:—

"To the Right Honourable the Solicitor-General for Ireland.

"Sir,—We, the members of the Chemists and Druggists' Association of Ireland (North and South Branches) respectfully bring under your notice the subject of legislation hearing on the trade we represent, and the relation of that trade to the public. You are doubtless aware that in 1875 an Act known as the Pharmacy Act was in 1875 an Act known as the Pharmacy Act was passed; whereby a Council and governing hody was created, which hody possessed certain powers prescribed by the Act. Under that Act the trade or calling of pharmaceutical chemists occupied the primary position, and that of chemists and druggists apparently the secondary place. Powers were given to the Council to hold examinations with a view to licensing proper parties for each grade; and the Council by resolution (see page 50, Calendar, enclosed) determined that only one grade should exist or be sanctioned. The position of traders in the interval hetween 1875 and the present has admittedly been unsatisfactory, and an Amendment Bill was introduced last session by the Pharmaceutical Society, and opposed by the chemists and druggists, as represented by our association; the ground of opposition being that the measure was one-sided and unjust, and threatened to inflict the most serious inconvenience on the community at large. The result of this opposition was that almost the entire House of Commons was arrayed against the measure. 'A compromise was entered into upon the lines embodied in a Bill (draft of which you have herewith); hut the session was so far advanced that the Bill could not be passed. This year negotiations were opened hetween the Pharmaceutical Council and the chemists and druggists with a view to the reintroduction of the Bill this session, but these negotiations were unproductive of good, owing to the declaration made by a minority in the Pharmaceutical Council that they would oppose the measure agreed upon hy the majority. It would appear questionable whether the measure could he carried this session; but our object in approaching you is to ask you to give the matter your favourable consideration, so that legislation might take place at the earliest possible date of next session, and if you would be good enough to favour us with an interview, either in London or Duhlin, we would

lay our views more fully before you, and put you in possession of facts connected with the subject, which in the multiplicity of your engagements you might not be aware of.

We have the honour to be."

(Here follow the names of the president and secretary of each hranch of the Society.)

Mr. Shaw, who spoke at considerable length, urged the Society to take immediate action in pressing its claims upon the Government, and in the event of the latter rejecting or postponing the Bill strongly advised that it should he at once taken in hand by themselves. The husiness heing concluded, the Belfast deputation were entertained at dinner at the Gresham.

SCOTLAND.

DUNDEE.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—At a meeting of this Association held last week, the chairman (Mr. T. C. Henderson) intimated that the half-holiday movement had resulted in a complete success, every chemist in the town having agreed to close during the Wednesday afternoons of the months of July, August, and September. This announcement was received with considerable satisfaction by the meeting, and thereafter office hearers were elected for the ensuing session. They are as follows:—Mr. J. M. Hardie, honorary president; Messrs. William Doig, J. W. Russell, and W. J. Camphell, honorary vice-presidents; Mr. John Forsyth (J. Hardie & Son), president; Mr. Skinner, vice-president; Mr. Thomas C. Henderson (Royal Infirmary), secretary; Mr. James Petrie (W. Doig & Son), treasurer. Wednesday, heing the first half-holiday, the memhers to the number of forty enjoyed an excursion to Balruddry, a pleasant country seat within easy access of the town. The weather was excellent, and the party greatly enjoyed themselves.

EDINBURGH.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The fourth hotanical excursion of the season took place on Wednesday, June 26, to Blackford Hill. Twenty-four members met at Blackford Hill Station at 9 p.M., and had a most delightful and profitable ramble round the western hase of Blackford and down the banks of the Braid Burn, reaching town again about 11 p.M. A large number of interesting specimens were collected, including Conium maculatum, Digitalis purpurea, and Sambucus nigra. Structural as well as systematic botany came in for a large share of attention, many students preparing for examinations finding these rambles valuable opportunities for acquiring that practical knowledge of plant forms demanded of the pharmaceutical candidate. The next excursion takes place on Wednesday, July 10, to Craigerook, hy train from Caledonian Station at 5.50 A.M., and returning from Craigleith Station at 8.1 A.M.

INVERNESS.

MUCH damage was done to the premises of Mr. Ogston, chemist, in a destructive fire which occurred in this town on June 23. The premises occupied by Mr. Mitchell, chemist, were injured to a smaller extent.

KHOOSH BITTERS IN COURT.—In the City of London Court on Thursday, hefore Mr. Commissioner Kerr, Messrs. Monsell Brothers sued the Khoosh Tonic Bitters Company (Limited), 29 Ludgate Hill, E.C., for 201. 6s., the cost of work done. The defendants set up a counter claim for 91.5s. From the evidence it appeared that the plaintiffs had agreed to remove some plant and office furniture from Liverpool to London at 80s. per ton. The goods were duly removed, but the defendants refused to pay, hecause, according to Mr. Henry Davis, managing director of the defendant company, some valuable posters, which had cost 350l., and which he told plaintiffs' clerk to he very careful with, arrived in London in a disgraceful condition. After hearing counsel the learned judge remarked, "All I can say is that both the plaintiffs and defendants seem to have a very careless way of doing business. To make a contract of this sort and not to make it in writing is ridiculous. I give judgment for the plaintiffs, with leave to the defendants to have a jury if they choose." Mr. Davis decided to have a jury.

General and Probincial Rews.

FATAL RESULT OF A MEDICINE.—The Rev. N. J. S. Naish, a Baptist minister, of Great Shelford, aged 27 years, died on June 21 from the effects, as shown subsequently at the inquest, of some aconite and chloroform liniment which it was supposed he must have taken with a view of relieving the excruciating pain he suffered from neuralgia. The coroner at the inquest remarked on the risk of supplying such a large quantity of a poisonous liniment (4 oz.) as was in the possession of the deceased, this having been supplied by the doctor.

Assault.—Oswald Buckridge (50), who calls himself a dispensing chemist, although he is not on the register, is under remand in Lambeth for violently assaulting a man named Orange, who keeps a coffee-shop. The policeman found Orange lying on the floor of his shop bleeding from the head, and he stated that Buckridge, who was being held by several persons, had banged him about the head with a gun. At St. Thomas's Hospital the wounds were found to be dangerous, the trigger having penetrated the skull. The accused stated that what he had done was in resisting an attempt to rob him.

THE LONDON COUNTY COUNCIL CHEMIST.—At the usual weekly meeting of the London County Council on Tuesday, Lord Rosebery, the chairman, presiding, the standing committee reported that they had before them an application by the borough authorities of Sheffield to Mr. Dibdin, the chemist to the Council, to advise them upon certain matters connected with photometry. The committee were of opinion that it was not expedient that the chemist, whose whole time and services belonged to the Council, should be allowed to do work and receive a fee from any other corporate body or person. They were therefore unable to recommend the Council to accede to the request of the borough authorities of Sheffield. The committee's recommendation was adopted.

FESTIVITIES.—The employés of Henry Marks & Sons (Limited), sponge merchants, 45 Houndsditch. E., had their annual outing at "Five Horseshoes," Hoddesden, Herts, on Saturday last, June 29. After a delightful drive, running, jumping, and other sports were indulged in. Dinner was served at 5 P.M., at which the managers and managing directors were present, and, after the usual toasts had been given, prizes were presented to the successful competitors. At the Holborn Restaurant on Saturday, June 29, Messrs. Hodgkinsons, Treacher & Clarke gave the annual dinner to their assistants. The chair was occupied by Mr. Gray, who proposed the toast of "The Firm." Mr. Richard Hodgkinson was vice-chairman, and responded for "The Travellers." After a short toast list was exhausted, the remainder of the evening was spent in an enjoyable manner. On Saturday, June 29, the employés of Raimes, Clark & Co., Leith Walk, Edinburgh, held their annual picnic, their destination being "Habbic's Howe," in the vicinity of the Pentland Hills—a place immortalised by the poet Allan Ramsay. After spending a very enjoyable day, favoured with delightful weather, they left for home, arriving in the city about 10 P.M.

FAILURES.—According to the statistics of failures issued half-yearly by Mr. Richard Seyd, F.S.S., the first half-year of 1889 shows a slight improvement when compared with the corresponding six months of 1888. In the earlier period the total number of failures recorded in the United Kingdom, including deeds of arrangements as well as bankruptcies, was 4,628; in the first half of 1889 the total number only reached 4,613. The growing popularity of deeds of arrangement is manifested by these statistics. In the first half of 1888 the proportion was 1,590 deeds and 3,038 bankruptcies; in the past six months the figures were 1,857 deeds and 2,756 bankruptcies. The following extract from Mr. Seyd's tables indicates the failures in the drug and allied busi-

First six months of 1883 1889

Wholesale druggists 6 (5 B., 1 D.) 4 (2 B., 2 D.)

Chemists and druggists 33 (22 B., 11 D.) 32 (19 B., 13 D.)

Surgeons, physicians, dentists . 22 (18 B., 4 D.) 26 (18 B., 8 D.)

Aërated-water makers . . . 11 (7 B., 4 D.) 12 (10 B., 2 D.)

A MAGISTRATE ON POISONING.—George Lock, aged 42. a dressing-bag maker, hailing from Birmingham, was charged on remand before Mr. Bros, at Dalston Police Court on Tuesday, with attempting to destroy himself by taking a quantity of oxalic acid. On June 19 he went to the pharmacy of Mr. Edmund Chubb, of Hornsey Rise, London, and purchased twopennyworth of oxalic acid, this being given in the crystal state and in a properly-labelled package. went direct to the "Hare and Hounds" public-house close by, and mixed some of the acid in a tumbler of beer and drank it. The police were called, as well as a doctor, and by prompt administration of emetics and other restoratives the man's life was saved, and he recovered after a week in the Great Northern Central Hospital. Prisoner now said hewas very sorry. He had signed the pledge, and saw the folly of his act. Mr. Bros: So many of these cases occur either through drink or jealousy, we shall have to think seriously what shall be done with such offenders. If they go on in this way they will have to be sent to the sessions to be dealt with. Prisoner in this case has expressed his sorrow and taken the pledge. He has been locked up for a week and is now discharged.

THE ANTI-VIVISECTIONISTS ON THE PHARMACEUTICAL ELECTION.—There was a meeting of the Anti-Vivisection Society (it goes by a longer title) in the Westminster Palace Hotel the other day, and curiously enough the Right Hon-the Lord de Ros, one of the Lords' Committee on the defunct Irish Pharmacy Bill, was in the chair. Several other representatives of the nobility were present, there were a great many ladies, and the medical profession contributed Dr. Berdoe, Dr. J. H. Clarke, Dr. Alexander Bowie, and Surgeon-General Gordon. The occasion was the annual meeting—hence the large and influential attendance. The only part of the business which interests us was Mr. Benjamin Bryan's speech. He led the crusade against Mr. Carteighe and others at the last Pharmaceutical Council election, and is proud, naturally, of the result. He told the meeting how Dr. Lauder Brunton and Professor Michael Foster had been appointed members of the Research Committee of the Pharmaceutical Council, and mentioned some of the "shocking things" which these gentlemen and Professor Cash have done in the way of vivisection; also that the committee thought they were warranted in taking alarm when they saw these men allied with the Pharmaceutical Society to further "research," research with drugs ostensibly, Mr. Bryan "supposed," but certainly with experiments upon living animals. How to stop this was wherein the committee did not quite see their way clear, and, it being too late to nominate new candidates for the Council of the Pharma-ccutical Society, the only plan left open, Mr. Bryan told the meeting, was to make a dead set at the President, and so to diminish the number of votes given to him that he might be put at the bottom of the poll, and thereby be warned that the course he was pursuing was one which would meet with opposition, and that he must beware of the consequences. The committee went into the election, and when they came out of it they had performed exactly the operation which they set out to do-that was, that Mr. Carteighe, the President of the Pharmaceutical Society, was the very last man of the fourteen who were returned to the Council this year. (Cheers.) "I hear," continued the secretary, "that he himself attributes it entirely to the action of the Anti-Vivisection Society that he was in that position. He has again been elected President of the Pharmaceutical Society by his colleagues, but I hope that at any rate the recent election will be a warning to him. He disclaims, I may say, the intention of promoting experiments upon animals. However that may be, I hope that if he had no intention the result of the Society's action will have the effect of fortifying him in resisting experiments upon animals, and that if he had the intention, it will prevent him ever going any further in that direction. Further steps will be taken upon this matter by-and-by. I hope we may clicit some opinion of the Council of the Pharmaceutical Society upon the subject before another election, but I believe the committee are resolved to go into another election next year if it is found expedient and desirable to do so." The only other speaker who referred to the matter was Mr. Douglas Patterson, pharmaceutical chemist, and County Councillor for the county of Nottingham.

Pharmacentical Society of Great Britain.

COUNCIL MEETING.

THE July meeting of the Council was held on Wednesday, under the presidency of Mr. Michael Carteighe, and with him at the table were all the other members of the Council except Mr. A. Southall and Mr. James Watt. The Secretary having read the minutes of the June meeting, which were adopted, the President read a note from Mr. W. D. Savage, of Brighton, acknowledging the resolution passed at the last meeting, in recognition of his services as member of the Council for twenty years.

The next business was the election of members, associates, and apprentices, which took up only a few minutes, and this

over, the Secretary read

THE FINANCE COMMITTEE'S REPORT.

This showed that at the end of the first six months of the current year the committee had the exceptionally large balance of 4,1081. in hand, due to the receipt during June of 1,1851. The Benevolent Fund account showed little of unusual interest, with the exception of the receipt of the legacy of 100l. under the will of the late Mr. John Williams, which sum the committee desired to invest in Government stock at once. Various payments for this month were recommended, including 721. 10s. to the Research Committee, 800l. to the London office for expenses, and 200l. to the Treasurer in Scotland for a similar purpose. The other payments were for salaries, annuities, paper, and the like, and, together with the items mentioned, amounted to 2,008l.

The President having stated, in reply to Mr. Evans, that the payment for research was made quarterly on the application of the committee, proceeded to say that the receipts for June were heavy owing to the examination fees. He referred to the Benevolent Fund account, and explained that it was their desire to get interest from donations as soon as possible, as that was the only way under by law that such monies could be used. The object of investing small sums in Government stock from time to time was to allow such money to accumulate until 3,000l. or thereby was got together, and then to reinvest it in ground-rents, which yielded 4 per cent., as compared with $2\frac{1}{2}$ to $2\frac{3}{4}$ per cent. derived from Government stock. The payments which the committee desired to make were of the ordinary character, and the large sums for the Edinburgh and London offices were required to pay examiners' fees.

The report was adopted.

THE BENEVOLENT FUND.

Th: committee had considered seven cases, two being deterred for further consideration until next meeting, and one was not entertained. Of the others two received grants of 10*l*. each, and two grants of 5*l*. The committee had considered the present condition of the Isherwood orphans, and referring to them in his short speech on the motion for the

adoption of the report,

The VICE-PRESIDENT said that the committee had had a consultation with the gentleman who had taken charge of them. He described in detail the present circumstances of the orphans, intimating that all except the young girl in Hull are in rather delicate health. In regard to one case which had been deferred, it was explained that the applicant is at present a bankrupt, and it had come to the ears of the committee that he was endeavouring to get his examination expedited because "afterwards the Pharmaceutical Society was to support him." Mr. Bottle desired to undeceive him on that point, and the committee had agreed to delay his case until after his examination.

Mr. Greenish considered that the statement regarding the orphans was rather important. The Council had given them an opportunity of earning a living, and experience had shown that they were not able to do it. He thought the committee should take into consideration whether the principle upon which they had acted was one which they

could continue.

Mr. HAMPSON said he did not think that the Council would do the same thing again.

Mr. ATKINS explained the nature of the interview which

the committee had had with the guardians of the children on the previous day, remarking that those who were delicate and had been compelled to give up their situations might find something more congenial. The fact was that there was only one child now who was really dependent upon the Council, the rest doing for themselves.

The matter then dropped, and the report was adopted.

LIBRARY, MUSEUM, LABORATORY, AND HOUSE.

The committee's report stated that the librarian, curator, and professors had attended and reported upon their departments. The President and Sccretary had been deputed to draw up the list of local secretarics, while the committee had considered the whole question of such appointments, but the matter had not so far advanced to the report stage.

The PRESIDENT, in moving the adoption of the report, said that although the committee did not at that time recommend any change in regard to the appointment of local secretaries, they were, nevertheless, desirous of having the assistance of as many of their members as possible, and it was hoped to bring up a report by and by. There were many things to be considered upon which it would be advisable to have the benefit of the advice of provincial members of the committee, who were not called upon to attend except when there was something exceptional to be considered. It was thought that it was invidious and unfortunate that local secretaries should be charged with the collection of subscriptions, which might with advantage be left to the office; and there was also to be discussed by the committee the broad subject of the manner of electing local secretaries, the present election, which was typical of many previous ones, having shown that a majority of the members of the Society did not take the trouble to vote.

The report was adopted, and on the motion of the President

the following gentlemen were appointed

LOCAL SECRETARIES FOR 1889-90.*

Aberdeen, Alexander Strachan Aberystwith, Edwin Price Wynne Abingdon, William Smith Accrington, Thomas Stanley Altrincham, James Thomas Clarke Andover, John Bienvenn Applehy, John Longrigg Arbroath, David Haitly Burn Ashbourne, James Osborne Ashby de la Zouch, Geo. Wm. Bullen Ashford, Joseph Ingall Ashton-under-Lyne, John Bostock Aylesbury, John Turner Ayr Banhury, George Vincent Ball Banff, William Alexander Bangor, Owen Jones Barnsley, Alfred Badger Barnstaple, Samnel Goss Barrow-in-Fnrness, Leonard P. Chapman Basingstoke Bath, Edward J. Appleby Bedford, James B. Taylor Belper, James Calvert Berwick, William Lyle Biggleswade, John Evans Bilston, Charles Gray Birkenhead, Alfred F. Brookes Birmiugham, Alfred Southall Bishop Auckland, Hy. Wm. Thor-B'ackburn, Alfred P. Garland Blackpool, John Laurie Bodmin, Richard T. Cardell Bolton, William B. Mason Boston, Frederick Wm. Haller Bournemouth, Alexander Dunean

Bradford (Yorkshire), George Rimmington

Brechin, David Holgeton Brecon, John Meredith Bridgend, David Jenkins B. idgnorth, Thomas M. Deighton Bridgwater, John Anthony Basker Bridlington, John Bowlt Parvis Brighton, James Ross Gwatkin Bristol, John Stroud Bromley Broughton Ferry, William Park Burnley, Bryan H. Cowgill Burslem, Thomas Blackshaw Burton-ou-Trent, George Wright Bury Bury St. Edmnuds, Frank Summers Baxton, Robert Wright Camborne, Thomas Fiddick Cambridge, Arthur Deck Canterbury, Edwin Bing Cardiff, John Munday Carlisle, Audrew Thompson Carmarthen, Richard M. Davies Carnarvon, John Jones Chatham, Holmes C. Crofts Chelmsford, Wilson Metcalfe Cheltenham, William Barron Chartsey, George Boyce Chester, George Baxter Chesterfield, John T. Windle Chichester, William Elliott Long Chippeuham, John Coles Coles Chorley, William Hill Christchurch, John Green Cockermouth, F. Ashley Cooper Colchester, William Pains Cordley Coventry, James Hinds Crew, Wm. H. Harrop Croydon, Josiah Clarke Darlington, James Robinson Dartford Deal, John Green

^{*} Local Secretaries are appointed in all towns in Great Britain (except Loudon and Edinburgh) which return a Member or Members to Parliament and in such other towns as contain not liss than three members of the Society or Associates in business.

Denbigh Derby, John A. Cope Devizes, Thomas Roberts Edwards Devonport, Francis Codd Dewsbury, Doncaster, James Howorth Dorking, Joseph Clift Douglas, Arthur William Brearey Dover, Alexander Bottle Dudley, Charles Hazard Garc Dnmfries, William Allan Dundce, James Hardie Dunfermline, Alexander Scath Durham, William Sarsfield Ealing, F. G. Curtis Eastbourne, Herbert Crook East Grinstead, John Tully Eccles, William Lamond Howie Egremont (Cumberland), Edward J. Ireland Elgin, William Robertson Epping, Thomas Rowland Evesham, Richard Loxley Dingley Exeter, William W. Broom Eye, Robert Bishop Falkirk, David Murdoch Falmonth, Walter Francis Newman Fareham, Charles Batchelor Faversham, William G. Lenfestey Fliut, Owen William Jones Folkestone, George Goodliffe Forfar, John Ranken Gainsborough, Henry T. Spouncer Galashiels, James Walker Gateshead, Glasgow, Alexander Kinninmont Gloucester, William Henry Foulkes Grantham, William Whysall Gravesend, R. Fcaver Clarke Greenock, Archibald McNaught Great Grimsby, Robert Cook, jun. Guernsey, John B. Nickolls Guildford, Edward W. Martin Haddington, James Watt Halifax, William Dyer Hanley, T. C. Cornwell Harrogate, R. Hayton Davis Hartlepool, William G. Jackson Harwich, Charles F. Bevau Hastings and St. Leonards, Charles A. Tharle Hawiek, Thomas Maben Helensburgh, George Harvie Henley-on-Thames, Charles J. H. Batchelor Hereford, Walter Williams Hertford, George R. Durrant Hexham, John Pattison Gibson Heywood, William Beekett Hitchin, William Ransom Honiton, Edward H. Dyer Horncastle, Herbert W. Kemp Houghton-le-Spring, R. H. Rowell Huddersfield, William King Hull, Charles Bains Bell Huntingdon, John Pullen Provost Huntly, George Chalmers Hyde, Joseph Wild Hytbe, Robert Alce Lemmon Ilkley, G. W. Worfolk Inverness, Alexander Allan Ipswich, Samuel Richard Anness Jersey, John Ereaut Keighley, Kendal, Joseph Severs Kettering, John F. Thursfiel 1 Kiddermiuster, Kilmarnoek, John Borlaud King's Lynn, Kingston-ou-Thames, S. Walmsley Kingswiuford, Kirkcaldy, David Storrar Kuntsford, Henry T. Silvester Lancaster, James Vinec Launceston

Leamington, W. H. Pullin Leeds, Richard Reynolds Leek, William Johnson Leicester, Walter Beales Clark Leigh (Lanes.), John W. Bennett Leighton Buzzard, W. Readman Leitb, Thomas Finlayson Leominster, R. B. Sandiland Lewes, Henry Saxby Liehfield, John Jaquest Perkins Lincoln, Joseph Maltby Liverpool, Richard Parkinson Llandudno, Joseph Winter Loughborough, Richard Scrase Louth, Mark Smith Lowestoft, Geo. Ernest Clarke Ludlow, George Woodbouse Luton, George S. Duberley Macelesfield, William Isaac Bates Maideuhead, Ralph Walton Maidstone, W. B. Stonham Maldon, David Wallworth Malton, James Buckle Malvern, David B. Coldwell Manchester, &c., F. Baden Benger Mansfield, Douglas J. Patterson March, Peter Hughes Davics Margate, Joseph Thomas Candler Market Harborough, W. B. Bragg Mcltou Mowbray, Geo. N. Wing Merthyr Tydvil, Walter Smyth Middlesborough, Thomas Buck Montrose, John Reid Morecambe, John Birkett, jun. Morpeth, F. E. Schofield Newark, Geo. W. Cherrington Newbury, Henry J. Davis Newcastle-on-Tyne, N. H. Martin Newcastle-uuder-Lyme, W. Poole Newmarket, Frank Arthur Barrow Newport (Mon.), Charles Paine Newport (Salop), John Barlow Newtown, Edward Owen Northampton, John Bingley Northwich, Griffith Humphreys Norwich, Francis Sutton Nottingham, William H. Parker Nuncaton, George Hiffe Oldham, Henry Bates Oswestry, John Evans Otley, Thomas Lockwood Over Darweu, Ralph Shorroek Oxford, George Thomas Prior Paisley, R. T. Mac Cowan Pembroke Dock, William Lasn Penrith, Wm. Kirkbride Penzance, Alfred Henry Buckett Perth, David Donald Peterborough, Marshall Heanley Petersfield, William B. Edgeler Plymonth, Thos. C. Sloggett Pontefraet, William Bratley Pontypridd, Talicsiu Cule Poole, Francis T. Pomeroy Portsmouth, &c., James L. Childs Preston, William Willan Prestwieh, Allan Mercer Radcliffe, Joseph Moore Pollitt Ramsey (Huuts), F. W. Palmer Ramsgate Edward Baily Reading, Ernest Cardwell Reigatc. Richmond (Yorks), E. B. Waltou Ripon, Joseph Brooks Parkin Roehdale, Edward Taylor Rochester, George Wm. Watts Romford, John William Lasham Ross, Thomas Matthews Rothcrham, John M. Horsfield Rothesay, William Duncan Rugby, Frederic P. Brown Ruthin, Theodore J. Rouw Ryde (Isle of Wight), H. H. Pollard Rye, William Allen Waters St. Albans, Arthur F. Ekins

St. Andrews, Alexander Govan St. Austell, Bnrcham Binks St. Ives (Cornwall), Tonkin Young Saffron Walden, John Gilling Salisbury, William Ralph Atkins Scarhorough, John Whitfield Sevenoaks, Edwin Pain Sheffield, William Ward Shields, Soutb, John Noble Shipley, Henry Dunn Shrewsbury, William Gowen Cross Skipton, Robert Wilks Southampton, Oliver R. Dawson South Molton, R. H. Swingburn Southport, William Ashton Spalding, John William Branston Stafford, John Averill Stalybridge, Allwood Simpson Stamford. Stirling, William Shairp Stockport, Samuel Kay Stockton-on-Tees, T. Brayshay Stoke-on Trent, Frank Adams Stourbridge, W. R. Selleek Stowmarket, George J. Gostling Stratford-on-Avon, Riehd. Hawkes Stroud, Samuel James Coley Sudbury, Sunderland, John Harrison Swaffbam, Frederick R. Bell Swansea, Nieholas M. Grose Tamworth, Thomas Boulton Allkius Taunton, George William Short Tavistock, William Gill Teignmouth, William Maunder Tenby, Moses Prosser Davies Tewkesbury, Thirsk, Tiverton, Paul Havill Torquay, Charles Shapley

Totnes, Charles H. S. Morse Truro, Thomas Bickle Percy Tunbridge Wells, Richard Howard Twickenham, Henry Shelley Tynemoutb, Ventnor, Charles Weston Wakefield, Thomas Duffin Walsall, George Elliott. Warrington, Hugh F. Greenough Warwick, Henry Pratt Watford, Edward Mitchell Chater Wednesbury, Samuel Jas. Gittoes Wellington (Salop), James Bates Wellington (Somerset), George. Jas. Windeatt Wells (Somerset), R. J. Manning Westbury, Charles Paine West Bromwich, C. J. Eynon Weston-super-Mare, Edwin Hall Weymouth, Thomas B. Groves Whitby, John Stevenson Whitehaven, Archibald Kitchiu Wick, Kenneth Miller Widnes, Wigan, Jonathan Phillips Wimbledou, Jonathau Dowdeswell Winchester, Richard Hunt Windsor, Charles J. L. Russell Wisbcaeh, Wokingham, Thomas Speucer Wolverhamptou, Fredk. Gibson Woodbridge, John Betts Woreester, Charles Virgo Worthing, Arthur B. Cortis Wrexham, J. F. Edisbury Wycombe, Samuel C. Furmston Yarmoutb, Great, W. S. Poll Yeovil, Frederick R. Maggs York, Joseph Sowray

It was agreed that the office of superintendent of written examinations should be offered, according to custom, to the local secretaries of the towns in which the examinations are held. In reply to Mr. Allen, the President stated that it would be best to leave him to decide when the discussion regarding provincial local secretaries should take place. It would be advisable to have the presence of as many country members as possible. Later, he referred to the appointment of a superintendent of examinations at Guernsey, stating that Mr. Collenette, who was not a member of the Society, had hitherto held the office, but as there was now a member of the Society in the place, it was necessary that he should get the appointment. His object in mentioning the matter was to assure Mr. Colenette that he was not in any sense superseded, for the Council quite appreciated his services, and were now acting in accordance with custom.

LOCAL CENTRES IN WALES.

Mr. Evans pointed out that the important town of Aberystwith, where there was a university college, and, he believed, a considerable number of candidates for the Preliminary examination, was not a local centre (see list on the next page). The nearest centres were Carmarthen and Carnarvon, a distance in the latter case of seventy or eighty miles, and involving a railway journey of four hours. He thought this was very inconvenient for the boys, and suggested that the committee should consider whether it was possible or not to remedy the matter.

Mr. Greenish thought that Aberystwith was a local centre at one time, but was removed from the list on account of the small number of candidates who attended.

Mr. Evans replied that that was before there was a college in the town, and he thought the fact that the town was now an important educational centre made a difference. He did not press the matter now, but wished it to be considered.

The PRESIDENT agreed with Mr. Evans, and thought he had done right in calling attention to the matter. The committee would keep it in mind.

SOME MINOR ITEMS OF BUSINESS

were then transacted. The Secretary first reported the results of the June examinations, which we printed last

week. Dr. Attfield, Messrs. Dunstan, Green, Holmes, and Ince were reappointed professors and lecturers in the School of Pharmacy; Messrs. Blunt and Bowen were appointed to conduct the Council prizes examination; and the President read a letter from Mr. J. Rutherford Hill, the assistant-secretary in Scotland, announcing the result of the voting for the Executive of the North British Branch, and the appointment of Mr. Wm. Gilmour as chairman, and Mr. David Storrar, Kirkcaldy, as vice-chairman thereof. Up to this point the Council had been remarkably quiet and undemonstrative. Business had glided with commendable celerity, and on the whole it was uninteresting.

The Secretary submitted the following

LIST OF CENTRES

and table of attendances of candidates at the Preliminary examination in each centre, which, through his courtesy, we are enabled to publish:—

_	1886 Jan., April, July, Oct.	1887 Jan., April, July, Oct.	1888 Jan., April, July, Oct.	1889 Jan.	1889 April	Total number of attendances at each centre at fourteen examinations
England and Wales. Birmingham Brighton Brighton Bristol Cambridge Canterbury Cardiff Carlisle Carmarthen Carnarvon. Cheltenham Darlington Exeter Hull Lancaster Leeds Lincoln Liverpool London Manchester Newcastle. Northampton Norwich Nottingham Oxford Peterborough Sheffield Shrewsbury Southampton Truro Worcester Yerk	64 11 55 15 9 41 24 46 29 17 55 35 16 35 16 35 16 33 48 7 18 26 21 29 17 25	66 20 36 9 16 25 39 59 22 10 24 31 20 29 11 32 29 20 29 20 11 32	65 20 37 18 10 16 54 49 26 17 26 28 29 28 52 176 83 49 13 21 47 12 42 24 24 24 27	10 39 11 68 10 59 88 153 4 4 20 15 23 88 34 77 27 11 2	18 38 56 99 106 75 47 105 105 107 107 107 108 108 108 108 108 108 108 108	223 57 145 58 42 97 135 180 89 46 84 122 78 74 224 107 206 578 344 164 47 87 168 39 62 117 73 104 57
Scotland. Aberdeen Dundee Edinburgh Glasgow Inverness	44 35 87 52 7	48 25 83 50 17	46 37 105 66 10	25 6 21 12 2	19 12 24 21	182 115 320 201 37
Donglas, I. of Man Guernsey Jersey	5 2 2	3 5 2	0 4 4	0 1 2	1 0 1	9 12 11

THE REPORT OF THE BUILDING COMMITTEE.

This the Secretary read. It set forth that in accordance with a resolution arrived at by the Council the architect (Mr. Lansdowne) had submitted specifications of the new property, Nos. 15 and 16 Bloomsbury Square, to seven contractors, who gave in estimates as follows:—No. 1, 10,800l.; No. 2, 10,535l.; No. 3, 10,410l.; No. 4, 10,287l.; No. 5, 9,393l.; No. 6, 9,276l.; and No. 7, 9,263l. The committee decided not to accept any of these contracts, and had instructed the architect to go over the plans again, and to modify them if possible so as to materially reduce the cost. Mr. Lansdowne had done this, and had obtained a fresh estimate from Messrs. Kirk & Randall, who agreed to undertake the work for 7,425l., this sum not including the expense of reconstructing a party-wall should that become necessary.

The PRESIDENT, in moving the adoption of the report, said it would be noticed that the rough estimate given by the committee some time ago was considerably exceeded by

the first contracts. The committee had, therefore, looking into the matter, thought that the plans might be modified. They had observed, for example, that the architect had used in some parts rather elaborate and costly forms of fittings, which, though pretty, were wholly unnecessary; and in this direction modification of the plans was suggested, and had been brought about by the architect, with the result that the estimate was reduced to the figure now placed before them. The principal cost, he explained, was incurred in the house to be used by the Society, which covered more ground than the one which they proposed to let. It was found, too, that in the present houses there were no vaults, and the expense of excavating the ground for and constructing these was included. As the original estimate was 6,500% or 6,750%, they were only exceeding that by about 600%.

Mr. Schacht asked for an explanation of the allusion to

the party-walls.

The President replied that some of them were good, but they never knew until buildings were pulled down what the condition of the party-walls might be. Probably they might have to repair or rebuild them, but there was every reason to believe that the walls were good. If not 250%, would be required for that work. He desired to add that they had been compelled to alter the plans at the request of the Duke of Bedford's new agent, who thought that the proposed sanitary accommodation was not what it should be, and they had, therefore, to increase their expenditure in that direction. Again replying to Mr. Schacht, he stated that 3,100% was the amount of the estimate which would be charged as the cost of the house to let.

Mr. EVANS wished the President to explain further why, if the architect's instructions were for a building to cost 6,500*l*. or 6,750*l*., he should have given drawings and specifications which brought in estimates from 9,000*l*. to 11,000*l*.

To this the PRESIDENT replied that the houses were not the same. The architect had gone in for more expensive fittings, and at present prices were a little harder. He could put up buildings at 6,500*L*, but, added the President, he is doing something which is consistent with the purposes for which the buildings are required, and he considered that the Council might rely upon the wisdom of the committee in making the recommendation.

Mr. EVANS still wanted to know what the final cost of the building would be. He did not forget that the first estimates for the examination hall had been largely exceeded. Would the new building cost nine, ten, or eleven thousand pounds l

The PRESIDENT replied that the party-walls were the only thing which might be added to the estimate.

Mr. Martin asked if the lowering of the price affected the quality of the material employed, such as the joists, doors, and the like, and the reply was in the negative.

Mr. ATKINS here inquired if the new house would be in such a condition that the Society could turn it to its own use at any future time, and the President was understood to give an affirmative reply.

Mr. Evans, still wishing to get at the final cost of the

property, asked what the fittings would amount to.

The PRESIDENT replied that, with the exception of the gasfittings and furniture, everything was provided for in the estimates. He did not think that it was wise for a person in his position to commit himself regarding final costs.

Mr. EVANS: Let us have something definite. When the examination hall was commenced we were told that it would cost about 6,000*l*., but it really cost between 10,000*l*. and 11,000*l*. Shall we have something the same again?

Mr. HAMPSON though the proposal was serious, and should be well considered and well understood before they decided upon anything.

Mr. MARTIN pointed out that about half of the expense

was in the nature of an investment.

Mr. ATKINS gave the committee a word of caution. They knew the exact condition of the Society's funds, and it was a matter of common experience in regard to buildings that the original estimates were always exceeded; things cropped up which were absolutely unavoidable and had to be done. Then in regard to fixtures they must not forget that if they removed any from the old building to the new they would have to replace them. It really was a matter which they should very closely watch, as there was no disguising the fact that they were putting their capital into a thing of

which only a part was remunerative, so they were reducing their income.

The PRESIDENT explained that the committee had at the suggestion of the Council modified the plans which were submitted ten months ago. The idea then was to have a place without a council-room, but some had a different idea, and the Council would bear him out in his statement that he was outvoted on that. It was a little hard, he smilingly added, that he should be twitted for exceeding the estimate

after he had done his best to be economical.

Mr. Allen put in a word in defence of the architect, saying that the plans were not the same as the original ones. They had tried to cut down the sanitary arrangements, such as lavatories, but the duke's agent objected to that, and the additional work would cost 250%. Then the vaults would cost something. The first estimates could not, of course, be accepted. When the committee came to that conclusion they asked the architect to go into the matter again, and at the meeting on the day before he had explained everything to them, and without affecting the quality of the material, had made a considerable reduction in the cost. He would add that the things which were removed were not essential; he had a list of the items, and would be glad to show it to any fellow Councillor.

Mr. EVANS firmly believed that the committee were doing their very best, and it was to relieve them of all responsibility that he was desirous of having some definite statement regarding the cost. The estimate was 7,425*l.*, and they were told that the party-walls might add 250*l*. Would the President now tell them what the extras would probably amount to, so that the Council might know once for all what they were undertaking? He was strongly of opinion, and had been all along, that the building at the back should never have been gone into until they were at liberty to commence building in the front. If they had waited they would have

saved some thousands.

Mr. Cross said he was glad of two things: first, Mr. Allen's statement, and, second, that the duke's agent had insisted upon an increase in the sanitary arrangements. The present accommodation of that character in the Society's

house was a perfect disgrace.

The President having assured Mr. Harrison that the modification in the plans did not involve any decrease in the accommodation for the Society's business arrangements, Mr. Richardson reminded him that the present council-room was required for an extension of the library, and Mr. Robbins added that much of what the architect had removed from his original plans consisted of tiles and terra-cotta decoration, which the duke did not care for, and which were rather expensive.

The President then replied, remarking that if the committee wanted any more money they would have to come to the Council for it. He declined to say anything definite as to the future cost, as an ungenerous use had been made of an expression which had fallen from a former member of the committee when the plans of the examination hall were under discussion. He maintained that the committee was good, large, and representative, and the Council could trust them.

Mr. GOSTLING, as a member of the committee, concurred with these remarks, and significantly added that it was impossible to say what the building would cost by the time it was done. Additions were unavoidable, and the Council must expect them; but the committee would always come to the Council for anything more that they wanted, and full opportunity would be given to judge of what was being done.

Mr. A. C. Abraham asked if the front of the new building was to be uniform with the one now occupied by the Society.

The PRESIDENT said, No. It was the hope of the Council that some day the plaster front of the old building would be removed, but that was an expensive luxury.

The report was then adopted.

THE INTERNATIONAL PHARMACEUTICAL CONGRESS.

The President read a communication regarding this from the Lombardi committee, of which we have already published a summary. In a short conversation which followed Mr. Atkins said he visited Milan last year, and from what he gathered the success of the Congress would depend less upon enthusiasm in Milan than upon outside support.

A FEEEHOLD INVESTMENT COMMITTEE.

consisting of the President, Vice-President, the Treasurer (Mr. Robbins), and Mr. Hills, was appointed to look after any business which might occur in regard to ground rent investments. Mr. Hills takes the place of Mr. Butt, and, referring to this,

Mr. ATKINS said that he wished to mention what a loss the Council had sustained in the removal of Mr. Butt, who had given so much of his time to these and other matters.

SIR WALTER FOSTER'S BILL.

The PRESIDENT at this point intimated that this was all the business, except the report of the General Purposes Committee, and the reporters were retiring when he recalled them in order to announce that he had received a letter from a member in regard to the Bill which had been introduced into the House of Commons by Sir Walter Foster. statement had appeared in a trade journal about this, and it had given rise to some alarm, as this letter indicated. To allay all fear he would now say what he had substantially said in reply to the letter-writer, that the statement in the article in question was not correct. Sir Walter Foster's Bill was to enable medical corporations to confer degrees or qualifications in sanitation, public health, and State medicine, such as the universities at present conferred. These qualifications had not been fully recognised when the last Medical Act was passed, and Sir Walter's Bill was merely to extend the provision, and it would in no way affect phar-

A SUGGESTION.

Before the Council went into committee Mr. Leigh suggested that copies of the reports of the committees should be sent to the members along with the agenda paper. If this were done those who were not members of certain committees would have a better understanding of the business which came before the Council, and he thought that it would facilitate business.

The PRESIDENT said that there was only one committee for which that could be done—the Library Committee which met in the intervals of the Council meetings. All the others met the day before the Council meeting, and it would not be possible to carry out the suggestion so far as these

were concerned.

Messrs. RICHARDSON, SCHACHT, EVANS, and ATKINS commented on the proposal, the last-named stating that any member could, if he wished, consult the committee minutebooks half an hour before the meeting, and so acquaint himself with what was coming forward. Some one dropped the remark that Mr. Leigh could have perfect confidence in the committees, and Mr. EVANS took exception to it. He had noticed, he said, that when anyone put a question such as this of Mr. Leigh's, some one was always ready to hint that it implied want of confidence in the committee. There was no reason in the world why it should. A member might desire information without in the least doubting that the committee was doing the proper thing. There was no ground whatever for suspicion.

This ended the business of the day, the sitting having lasted barely two hours.

NORTH BRITISH BRANCH.

A MEETING of the Executive of the North British Branch of the Pharmaceutical Society was held in the Society's House, York Place, Edinburgh, on the afternoon of Thursday, June 27. The chair was at first taken by Provost Watt, Haddington. There were also present Messrs. John H. Fisher, Dunfermline; William Gilmour, Peter Boa, James Mackenzie, J. B. Stephenson, and Thomas Thompson, Edinburgh; Charles Kerr, Dundee; Alexander Kinninmont, Glasgow; Thomas Maben, Hawick; John Nesbit, Portobello; and Messrs. Paterson and Strachan, Aberdeen.

ELECTION OF OFFICERS.

Provost WATT intimated that as this was the first meeting of the newly-elected Executive they would have to proceed with the appointment of a chairman. On the motion of Mr. J. B. Stephenson, seconded by Mr. James Mackenzie,

Mr. GILMOUR was unanimously re-elected to the chair. On

taking the position he briefly thanked the members for the honour done him.

Mr. Storrar (Kirkealdy) was elected to the vice-chair on the motion of Mr. Watt, seeonded by Mr. Maben.

The local members were appointed as the House Committee, and to make arrangements for the evening meetings during the winter months.

It was also resolved, to suit the convenience of members from a distance, to fix the hour of meeting of the Executive at 1 P.M. prompt.

THE SALE OF MEDICATED WINES BY CHEMISTS.

The CHAIRMAN said there was an important matter which had been troubling some of the members, and that was as to the legality of their selling medicated wines. This was, he thought, the best time they could have to exchange opinions on the subject. He might say there had not been much trouble in Edinburgh, but he was informed that in the North some feeling had arisen on the part of the authorities.

Mr. KINNINMONT (Glasgow) said that in the Western eity two parties held a lieenee for the sale of such liquors as those mentioned by the Chairman—Messrs. Frazer & Green, and the Apothecaries' Company. The first-named firm had four shops, but they only held the licence for one. They, however, eould supply their eustomers in any part of Glasgow from the licensed premises. The other company undertook as a condition not to sell the liquors in question on the Sunday on any account. There was a chemist down the Paisley Road who wanted a licence on the same conditions, but he was refused. It had been suggested that chemists should be permitted to supply specified wines, but limited to druggists, and that that would obviate the danger. He did not know anything about that, but he for one did not want the introduction of the American system of druggists selling liquors.

The CHAIRMAN asked on what principle did the justices refuse the granting of the Paisley Road licence.

Mr. KINNINMONT replied that they intimated they had no limit but the giving of a groeer's certificate.

Mr. Paterson (Aberdeen): You must apply for a spirit licence as well, but you cannot open on Sunday.

Mr. KINNINMONT: And if they granted to one they must

grant to all. Mr. Peter Boa asked whether the licenses of Frazer & Green and the Apotheearies' Company were of the nature of

Mr. KINNINMONT could not tell as to that.

wholesale traders' licences.

Mr. PATERSON: The Apothecaries' Company has a retail licence.

Mr. STORRAR understood that Frazer & Green paid 12l. 12s. a year.

The Assistant-Secretary: And they give an undertaking to the magistrates that they will not sell on Sunday

Mr. Kerr (Dundee) remarked if there was anyone who had a right to refuse it ought to be the Inland Revenue. He himself held a wine licence, for he had to take it out for Pearson's and Coleman's wine and tannin wine. Personally he had no trouble in getting it in Dundee. Two magistrates had only to sign the document and he got it, and for that he had to pay 2l. 4s. $4\frac{1}{2}d$.

Mr. STORRAR: Then you are under a grocer's ordinary licence. How do you do with the officials if you sell after hours?

Mr. Kern: Nobody bothers me. Of eourse I only sell medicated wines; but I was told I could sell all kinds.

Mr. STORRAR remarked that he had not taken out a licence as he found he would be under the control of the magistrates in the conduct of his business. He could not then open on

Sundays, or even before 8 o'clock in the morning.

Mr. Paterson pointed out that if they took a 10l. lieence they could open on Sunday and sell at any time they liked. That was an Excise licence, and under it they could sell legally any of the wines mentioned. They would not be under police supervision in the same way as under an ordinary wine licence. Under the latter, if they had a judicious superintendent of police and procurator fiscal, they probably would not be interfered with; but the magistrates made no bargain with them whatever. They took the licence, and if they opened on Sundays they were liable to be prosecuted,

and for selling after hours the same. Besides, he suspected, if the superintendent of police had his attention drawn to the matter, he would have to forward the case to the fiscal for prosecution. Even some one in the trade might use the power without any consideration for his neighbour, and action would follow all over the country. That, he thought, would be against the interests of the public, because there must be some means for their getting medicine on Sundays. In the North they were having a little trouble over the matter; and, as far as he could judge, the hest plan would be to get certain of these wines put in the Pharmacopecia, and then they would be saved any trouble in respect to them. The Chancellor of the Exchequer, he thought, should be approached on the subject either by the Society or hy the ehemists all over the country. Let there be a lieence for medicated wines similar to what there was for sweet and British wines, and then they would not be under police supervision in regard to them. Again, if they were to act under the grecer's certificate for selling certain quantities of these wines, they would have no resource against anybody disputing their account.

Mr. Mackenzie: No appeal? Mr. Paterson: You would either have to get eash or put it out of the account altogether. He had put it to an official in Aberdeen, and he said that the Tippling Act might be brought in force. Thus an ingenious lawyer might chalk these wines out of your hill. Again, another restriction would be that they would have to supply their customers out of standard measures. It should, he held, if they got the Chancellor of the Exchequer to pass an Aet as he had indieated, be left to the Inland Revenue to issue regulations, as they did in other departments, as to what were medicated wines

Mr. Watt had the greatest possible objection to have anything to do with a licence. He was afraid they would be elassed with a number of people who were very desirous to put the trade in that direction. He hoped he would never see ehemists pushing the sale of these wines.

Mr. PATERSON explained that this would not be a licence from the magistrates, but from the Exeise, the same as for

methylated spirits.

Mr. WATT, continuing, said he did not know what the sale of these wines by provincial chemists could be, but he was sure the sale would never pay for an expensive licence. As he had said, he would not like to see chemists cultivating the trade more than was indispensable. A suggestion made in one of the journals some time ago seemed to him to be the easiest way out of the difficulty for those chemists who did not eare to hold licences, and that was that each of the wines or articles having in it a spirit chargeable with duty should have also on it a special charge for the licence. He further thought that if it was strictly gone into ehemists could not hold grocers' licenees and sell methylated spirit.

Mr. STORRAR said he had a letter from the Board giving him permission to hold a wine lieence, and also one for methylated spirits, the condition being that either the one or the other should he received stored, or sold in sealed bottles, which medicated wine was.

Mr. PATERSON: Pepsine wine is not.

Mr. WATT held he would not like to see them going forward for a licence for the sale of wines; rather they should repudiate the idea as much as possible, and keep to their own business. It had certainly become a very large trade, and was being pushed very extensively, but whether it would eontinue or not he did not know. However, he could not help stating his aversion to chemists holding a wine licence which would eover all sorts of wines.

Mr. Thos. Thompson (Edinburgh) said that doetors ordered these wines, and chemists must supply them.

Mr. Mackenzie said the real question was whether it was worth their while meddling with licences. The makers of these articles, he thought, could easily make them so as to be taken with wine, leaving it to the consumer to supply his own wine. The less they had to do with such licences the better.

Mr. MABEN (Hawick), with regard to Coleman's wine, for example, said if any person came to him he would say he did not keep it, but let him be furnished with a doetor's prescription, he would get a bottle for him.

Mr. KINNINMONT maintained that was illegal. They ought to say the grocer next deor kept it, and they could be supplied therc. Chemists had no more right to sell that than port or claret.

The SECRETARY: They want to bring pepsine wine under

the law.

Mr. STRACHAN (Aberdeen) had a conversation with one of the officers on the question. He put it to him whether he could supply eight ounces of pepsine wine just as he could supply eight ounces of rectified spirit, and he said "No." He further asked, supposing a doctor prescribed a wine, was he at liberty to give it? He declined to frame an answer to that question, but his personal opinion was that he (Mr. Strachan) should not be prosecuted, but he would not guarantee that he would not.

Mr. MABEN said as to that he would run the risk of making up a doctor's prescription, for it was ridiculous to think they could not do so. It was on the doctor the onus lay, and not on them. He agreed with Mr. Watt it was a very risky business to try to get a new licence for themselves. As to having a special licence for medicated wines, he would ask, What were medicated wines, and where would they draw the line? They would never be able to fix a standard where they could say this was medicated wine, and this was not.

Mr. MACKENZIE: The less the trade has to do with it the

better

Mr. THOMPSON said that the difficulty must be got over some way or another. They must either take out grocer's licences or give up selling these wines.

Mr. PATERSON mentioned in regard to one of the Glasgow cases that they had circulated the information that they did not open the branch which was licensed on the Sunday.

Mr. KINNINMONT said the Buchanan Street shop was closed on Sunday, but the Apothecarics' Company's premises were open all day, but on the understanding that they did not sell. Were this permitted generally he believed it would practically turn drug shops into shebeens.

Mr. STORRAR pointed out that doctors would prescribe oleman's wine. They either kept it in stock or not. If a Coleman's wine. customer came in for it, it was all very well to say, This is a similar thing; but the purchaser would not have that which was not according to the doctor's prescription. Chemists could not decide the question; but let them have a scheme whereby they could fulfil the doctor's prescription without objection. He did not care about taking a grocer's licence, but was there not some way to get over the difficulty?

Mr. MACKENZIE said they must approach the makers of

these articles, and say they could sell them if they were

made so as not to require a licence.

Mr. STORRAR: But then they could get the grocers to sell

their manufactures.

Mr. WATT repeated his opinion that a stamp should be put upon the bottles equivalent to the licence-say a small

Mr. BoA said that still might be open to some objection as to bringing the sale under the Tippling Act. The proposed stamp might be simply abused. They might be selling a wine that was nominally a medicinal wine, but not so really, as many of the so-called medicinal wines were really not medicinal wines, but sold for a purpose. People might buy that wine simply for a tipple, and practically the chemist would be on a level with the publican. While recognising the convenience at the present moment in certain cases of taking out a grocer's licence for the purpose of selling these wines, he did not think it was a principle which should be recommended to the trade in general. His own feeling was that the sale of many of the wines, without mentioning any names, should be discouraged, because practically they were not medicinal wines. It was a misnomer to call them so. With regard to what was really medicinal wine, he thought they had little to fear in the way of prosecution. If they made their pepsine wine in a proper manner, as a medicinal agent, they should have no fear. They might have no right to sell it practically, but if they could show that the wine was a medicine, and legitimately made, he did not think they would be prosecuted. Of course the supply of spirits, such as brandy even, for a medical prescription was quite illegal. If it were mixed it might be allowable.

Mr. MABEN: But if the prescription is signed by a

Mr. Boa believed the onus would be on them, and not on he doctor. If anybody came to him for a compound wine and druggist, Winsford, Cheshire. Aged 73.

he told him he did not keep it, but recommended him to get a bottle of good port next door. (Laughter.)

Mr. NESBIT (Portobello) concurred in the opinion that the less they had to do with these wines the better. To take out a grocer's licence would bring them down to the level of

a publican.

Mr. MACKENZIE thought that they, as a society, should turn their attention in the direction of utilising their organisation and influencing the Medical Council. to agitate the question again, and get a representation of two members of the Society upon the Pharmacopæia Committee. Thus they might get the medicinal preparations in the Pharmacopæia secured to them, and get them to do something in the matter which they had been discussing.

The CHAIRMAN said the discussion had done good in this way, that those members who found the shoe pinching would see that they must take the consequences. If they took out a grocer's licence they saw what was involved, and that was just out of the fryingpan into the fire. He did not think they could carry the discussion further that day.

Mr. STRACHAN said they had held a meeting at Aberdeen, and what Mr. MACKENZIE had mentioned was practically what they resolved upon, namely, to make application to the General Medical Council to insert in the Pharmacopæia a

formula for the wines in question.

Mr. PATERSON urged that the question should be put upon some legal basis, and that some representation to that effect be made to the Council. It was unfortunate that they, as a body, should be selling pepsine wine—which he held they were perfectly entitled to do—and run the chance of being hauled up for it.

Mr. BoA: We are not disturbed in Edinburgh.

Mr. PATERSON: We are warned in Aberdeen; prosecution is threatened.

It was then agreed to adjourn further consideration of the subject until next meeting. This was all the business.

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

COULL-SUTHERLAND.-At 75 Queen Street, Edinburgh, on June 27, by the Rev. J. S. Macdonald (cousin of the bridegroom), South Leith Free Church, George Coull, B.Sc., pharmaceutical chemist, Edinburgh, to Jeannie, eldest daughter of D. S. Sutherland, Edinburgh.

McMurtrie—Murdoch.—At Milltown of Rothiemay, on June 26, by the Rev. John Villans, Huntly, assisted by the Rev. M. P. Noble, Macduff, John McMurtrie, chemist, Macduff, to Maggie Scott Mitchell, fifth daughter of George Murdoch, merchant.

DEATHS.

ADCOCK.—On June 19, Mr. Isaac Dickson Adcock, chemist and druggist, Alcester. Aged 54.

BURCH.—On June 16, Mr. Robert Burch. chemist and druggist, High Street, Saffron Walden. Aged 86.

COCKER.—On June 15, Mr. Benjamin Cocker, chemist and

druggist, Newington Green Road, London. Aged 59.
CRISPE.—On June 27, at 4 Cheapside, James Crispe, of
Leatherhead. Aged 68. Mr. Crispe died at Leatherhead, his
native place. He had been for many years a representative
on the City Corporation of the ward of Farringdon Within.

ELLIS .- On June 10, Mr. George Waddington Ellis, chemist and druggist, Liverpool Road, Birkdale. Aged 33.

FIELD.—On June 1, Mr. M. B. Field, chemist and druggist,

Whitmore Reans, Wolverhampton. Aged 64.

HILDITCH.—On June 13, Mr. Thomas Hilditch, chemist and druggist, Tipping Street, Ardwick, Manchester. Aged 69.

HUGHES.—On June 3, Mr. Lloyd William Hughes, chemist and druggist, Ruthin. Aged 56.

NORTH.-On May 31, Mr. Walter Dudley North, chemist and druggist, Upper Kennington Lane, London. Aged 62.

Pluse.—On May 31, Mr. William Pluse, chemist and druggist, Hurworth Place, near Darlington. Aged 68.

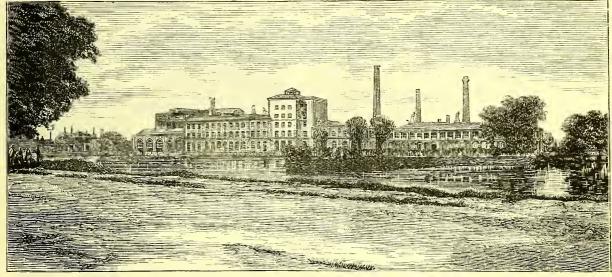
SINGLETON .- On June 20, Mr. Henry Singleton, chemist

THE PHŒNIX MILLS, DARTFORD.

WE have mentioned previously that Messrs. Burroughs, Wellcome & Co., of Snow Hill Buildings, Holborn Viaduct, were remodelling an old paper factory at Dartford into a pharmaceutical manufactory and warehouse for the accommodation of their business, to take the place of the works they have occupied for some years at Wandsworth. We understand that the premises have been bought by Mr. Burroughs, and are let by him to the firm. On Wednesday afternoon a large party assembled, on the invitation of the firm, to take part in the house-warming of the new establish-Those who had seen the place before Messrs. Burroughs, Wellcome & Co. took it in hand were astonished and charmed with the transformation which had been effected. In September last the works and the grounds in which they stand were little else than a wilderness. Now the scene presented was something like that depicted in our sketch, except that the brilliant bloom of thousands of flowers, a showy display of flags and banners and coloured lanterns, a uniformed band, and the lively spectacle of some 500 or

600 guests, would need to be added to properly represent it. The building, as we now find it, has been studiously adapted to the requirements of the special business which has to be transacted there. The central portion of five floors was at one time a two-floored engine-room, and has

intersected by partitions. Entrance to it is obtained by wide doorways at each end, in front, and by another door at the back, through which we step on to a newly-constructed wharf, which traverses the whole length of this building. This wharf adds greatly to the value of the property, as it will enable the firm to bring all their goods by water from London, thus effecting a great saving in carriage, which by rail is exceptionally heavy to this part of the country. Ascent to the first and other floors is obtained by staircases, one at each end of the building. The first floor is already fitted up as a store-room and packing department. Shelves round the walls serve for the former purpose, and for the latter five tables, each 80 feet long and 4 feet wide, provide ample accommodation for the little army of girls who put up the "Kepler" extract of malt, hazeline, beef and iron wine, and other specialities with which the drug trade is so familiar. Every provision is being made here for easing the labour of the employés, and to do away with the necessity for great exertion of physical force. For example, we noticed a neat rolling tray, designed by Mr. Burroughs, and capable of taking from four to six dozen of 2s. 9d. "Kepler" malt, which when filled can be passed along from one worker to another with remarkable freedom. Compressed goods will also be packed in this department, and provision has been made for a gigantic stock, which will be stored in specially constructed lockers. Dressing rooms and lavatories are provided on this floor for the girls, and are to be fitted up in elegant style. Drying rooms for bottle;



THE NEW FACTORIES.

been reconstructed to suit the laboratory requirements for "Kepler" malt extract, so that the whole of the operations, from the grinding of the malt to the evaporation of the sweetwort, may be conducted within one building, and distinct from all other work going on in the factory. old lake, which the River Dart keeps always full, had through long disuse become rank and green with aquatic plants and the ever accumulating river deposits, but within the past few months it has been emptied and thoroughly cleaned out, a little island established in the centre, and a new wall built where the old one was out of repair. This change alone gives a different and more healthy appearance to the place, but it is when we get inside the mills that the work of renovation is seen in its fulness. There are four distinct buildings connected with each other, viz., the shipping department, to the left, the laboratories and packing department between it and the malt extract laboratories, and to the right of the latter the mechanical workshops. laboratories and packing department constitute the principal building, the interior of which measures 110 feet by 75 feet, and it has been entirely gutted out, and new floors put in it. The ground-floor is the main laboratory, and will give splendid working space, as it is abundantly lighted from both sides, and is not

are also placed here. The second floor is perhaps the most interesting to the pharmacist, for it is here that all the operations involved in the manufacture of compressed tabloids are conducted, and the fact that the compressing machinery used by the firm is of their own design and nowhere else equalled in style and celerity adds rather to the interest of the place. We may say that this is the only secret department of the establishment. Messrs. Burroughs, Wellcome & Co. rightly consider that the fruits of the years of labour which they have devoted to this part of their business should in some measure be protected; and they therefore entrust the department to skilled workmen, who, like all others employed by the firm, have a share of the annual profits. The compressing and triturating laboratories occupy the same space as the depths beneath, but here unlike those, the floor is divided by glazed partitions into five apartments, the centre one being for the compounding and compression of toxic remedies. As far as possible different classes of goods are made and packed in departments set aside for themselves. Thus, hypodermic tabloids are made in one room on this floor, and when finished are stocked in peculiar cupboards, one for grain-dosed remedies, and the other for those dosed according to the metric system. Each cupboard consists of seven shelves, on each of which are eleven sliding

trays, each taking six bottles, the capacity of the bottle being for 3,000 tabloids, so that the two cupboards, though occupying wall space to the extent of 4 feet by 4 feet each, afford accommodation for no less than 2,772,000 doses of

medicine.

"This is an idea of mine," said Mr. Borroughs, "to insure that no bottles of newly-made tabloids will be placed in front of older ones. When a laboratory man fills a new bottle he comes here, pulls out the tray, and places it behind. This room will be used for packing hypodermic tabloids, and you see they will be made in the one adjoining, the largest room being used for the ordinary tabloids." Walking through these rooms, Mr. Burroughs called our representative's attention to a small Sturtevant engine which is to be used for working some of the compressing machines. "The peculiarity of this engine," said Mr. Burroughs, "is that it causes practically no vibration. It could be worked on that table without causing a tremor in the legs. The same maker's ventilating apparatus will be used in the building. Now, we shall walk through the 'Kepler' malt laboratorie's. Let us go to the top," Ascending the stairs to the fourth floor, and looking out at the front window we get a pretty view of the town of Dartford. Through a corresponding window at the back, the malt will be hoisted from the wharf or barges below, and carried to the eommodious stores on the top floor. From this, through a hopper, it will pass to the grinding room below, and then be transferred by similar means to the mash tuns. After digestion, the sweetwort is passed down to tanks in another floor, where it is allowed to settle before it is transferred, for concentration, to the colossal vacuum-pans which will shortly be placed in the first floor of this building. The ground floor is to be occupied as an engine-room, and here there is already in place a large new boiler supplied by Messrs. John Penman, of Glasgow, and fitted with a mechanical "stoker" by Bennis, of Bolton.

A spacious office was next passed, then a bottle-washing room, a mechanics' shop, a smithy, and so on. It is impossible in brief space to do justice to all the arrangements. Nothing seems to have been forgotten which will expedite work. Between the long frontage and the lake a wide gravel esplanade, bordered with lawns and elegant flower beds, refreshes the eye. The kitchen garden at the side is also well stocked, and everything looks in a flourishing condition. A fine lawn, extending to nearly an acre, suggested tennis, and a remark about this brought the reply from Mr. Burroughs that in paying so much attention to the ornament of the grounds they had in a large measure the pleasure of their employés in view. "Eight hours a day is sufficiently long for any man or woman to work," he said, "and that is what we hope to fix as the hours of labour here. In their own time our employés can usc these grounds as they choose, and we hope to form a swimming elub, for, you see, the aquatic accommodation is ample and safe."

"Where do you get your water supply for factory use, Mr. Burroughs?"

"Oh! we don't use the water from the Dart. We have four natural wells over 125 feet deep; right down below the chalk, and the water is as clear and sweet as could be. have kept it for two months in bottle without its becoming in the least tainted. We have a 15,000-gallon tank on the top of the main building for this water, and another of 5,000 gallons capacity; but before it is used in our manufactures it will be softened by the Potter-Clark process.'

"You have spent a good deal of money on the altera-

tions?

"Yes, 5,000% or thereby: and we have employed all our own workmen, carpenters, mechanics, bricklayers - everybody has been directly paid by us, so that there has been a considerable saving. Then all the work has been most carefully supervised by the manager of these works, Mr. Walter H. Hutton, who is a civil engineer and very prolific in ideas. It is he who has worked out the structural improvements in the buildings and laid out the grounds.'

Our conversation took place before the company came. These included most of the notabilities of Dartford, a good part of the staff, private friends, and business associates, and, in some cases, rivals. Mr. W. H. Stead and other representative journalists were also present. Mr. and Mrs. Burroughs, Mr. Wellcome, and the chiefs of departments were busy looking after the pleasure of their guests, and delicate provision was made for the refreshment of the hungry and thirsty.

Among the visitors best known to chemists we noticed Mr. E. W. Grimwade, Mr. Lionel Newbery, Mr. John Moss, Mr. F. W. Fletcher, Mr. H. E. Stevenson, Mr. John Morgan Richards, Mr. J. W. Drysdale, Dr. Kernot, of Calcutta, Mr. Colclough, Mr. A. W. Gerrard, Mr. Bergheim, Dr. Burrows, Dr. George Brown, Dr. Gubb, Mr. A. A. Tindal, Mr. Lascelles Scott, Mr. E. J. Reed, Mr. C. J. Strother, Mr. D. P. Stevens, &c.

At about 6 P.M. the formal inauguration of the factories took place. The company, numbering over six hundred, were seated in the shipping department, which was gaily decorated for the occasion. The Rev. Alan H. Watts, vicar of Dartford, occupied the chair. Messrs. Burroughs and Wellcome were at his side, and Mr. Henry George, the



MR. HENRY GEORGE.

famous American orator and author, Dr. Clark, M.P., and other gentlemen filled the platform. The proceedings were all got through in an hour. The following is a report of the speeches:

The VICAR said at that preliminary meeting the old motto, "Blessed be he that speaketh few words, for he shall be asked to speak again," would be literally fulfilled. (Laughter.) He feared it was too great an honour that had been placed upon him by Messrs. Burroughs, Wellcome & Co., in asking him to take the chair at the opening of those mills. but he felt it was a duty incumbent upon him to be present. In the first place he would fain, in the name of the townspeople of Dartford, offer to Messrs. Burroughs & Wellcome, and all those who were associated with them, a right hearty welcome. (Cheers.) He could assure the members of the firm that they had the freedom of Dartford (cheers), and although they might not have the privilege just directly of voting at their parliamentary and municipal elections, he felt sure that the townsfolk would give them the entrée to all their institutions of the past and of the future. (Applause.) There were many of their institutions which needed a little help (laughter), and some of which were still in esse, but not in posse, but with some of that enthusiasm and go which characterised the nation over the water-sometimes ealled their cousin Jonathan—he hoped that some of those institutions which were only in esse would very soon be in posse. (Applause.) Secondly, he felt it incumbent upon him to be present because he recognised the fact that an institution such as they were opening would be one of the greatest helps to the

kigher life of the town, especially when the heads of the firm really took a definite interest in the mental and spiritual improvement of their employés. (Hear, hear.) Such institutions were a marvellous help to the religious work of the town, and on opening a large workshop like that, when they knew that the men at the head of it would not look upon their employés merely as hands, but as human beings, who had minds to cultivate, the new works should be quite as welcome among them, and by those engaged in spiritual work, as would a mission hall or a kindred institution. (Applause.) If Messrs. Burroughs & Wellcome fulfilled the programme they had laid down, and which he understood had been fulfilled in other places, and took the same definite interest in their workpeople, the mill would soon be the centre of a mighty work in the place, and might possibly set the whole machinery of the town running a little more rapidly. (Cheers.) He was very pleased indeed to be present at the opening of those mills, and he begged to give Messrs. Burroughs & Wellcome a very hearty and cordial welcome to their town. (Cheers.) He understood that the speeches which were to follow were to be of a strictly nonpolitical character—that was to say, there was to be no partisan bias to distinguish any speech. (Hear, hear.) Whatever was to be said they wished to say it in the spirit of the greatest charity, and in such a way that Conservative or Liberal, Whig or Tory, would be able to depart without thinking that undue advantage had been taken of the opening of the mills for the introduction of politics, or anything that might arouse party feeling or prejudice. They were to have had a speech from an American gentleman—a great financial authority on the other side, the Honourable J. P. Bigelow-but he was sorry that he was not well enough to speak. They had, however, a lengthy list of speakers, and the would now call first upon Mr. Hesketh, C.C., in the name of the laity of Dartford, to extend a hearty welcome to Messrs. Burroughs & Wellcome. (Loud cheers.)

Mr. HESKETH, C C., said, as one who had been professionally engaged in the town for some years past, he felt that he was somewhat in a position to extend a hearty welcome to the new firm of Messrs. Burroughs, Wellcome & Co. (Cheers.) Those of them who could recollect the faces of the people in Dartford a year and a half before, when the mills were shut down, would know what long faces the people pulled—(laughter)—and would now have the pleasure in looking at the faces at that meeting, when they were looking forward to the works being again opened, and especially when they knew the conditions under which the enew firm were going to begin. (Applause.) They heartily welcomed the new firm, and he hoped that the mills would be kept open long for the benefit and prosperity of the firm

and the town. (Cheers.)

Mr. HENRY GEORGE (who was warmly cheered) said he thought he should be expressing the feeling of everybody when he said that it gave him great satisfaction to be present at the opening of the Phænix Mills-(cheers)-especially under such auspicious circumstances. It was putting a good deal into a few words when he said that Messrs. Burroughs & Wellcome's was a good business, conducted by good men, in a good way, and in a good place. (Applause.)
It was a good business, and he could understand some of the enthusiasm that was put into it, when their products embraced some of the latest discoveries for the alleviation of pain and the cure of disease. Then the business was conducted in a good way, by men who regarded their employés not merely as hands, as the Vicar had said, but as human beings. Now they were only working $8\frac{1}{2}$ hours a day, and he had been told by the members of the firm that they proposed to begin on the eight hours' system in Dartford. (Cheers) In addition to paying the regular wages, they had also distributed a percentage of the profits arising from the business among their employes at the close of each financial year. (Applause.) They proposed, he was glad to hear, to extend and continue that system in Dartford. It was a good business, conducted in a good way and by good men. He had long known the senior member of the firm personally. He was proud to own him as a friend, and he felt glad to think he was a countryman of his. If their experience of Mr. Burroughs should be anything like his own, he could tell them that the longer they knew him the truer they would find him and the better they would like him. (Cheers.) Both Mr. Burroughs and

Mr. Wellcome were men beyond their business. That he knew was true of Mr. Wellcome, and he had still more reason for knowing it to be true of Mr. Burroughs-doing all he could for those with whom he came in contact. season and out of scason he had been untiring in his endeavours to make, not merely his little section, but the whole world better for his having lived in it. (Cheers.) And now these men had brought this good business into a good place. (Laughter and applause.) That mill, as far as he was able to judge, gave them the room and the scope they required, and as for the beautiful little village of Dartford-(Voice: "Town, please")—he could conceive of no better location, unless it were the banks of the Hudson yonder, in Mr. Burroughs's native state; but the reason the business came to Dartford instead of going to the banks of the Hudson he hoped to tell them in his subsequent lecture. He would conclude by wishing the firm the greatest prosperity

and the largest usefulness. (Prolonged cheering)

Mr. RICHARD GOWING (secretary of the Cohden Club) was the next speaker. He said he was exceedingly sorry that the eminent American gentleman referred to by the Vicar was not present, because on account of his absence he was placed in the position of having to follow Mr. Henry George, which was not a light task for anybody. It would have been a very heavy task for him, except that he only had to say a very few words. He had known Mr. George for some years by reputation, but he had not met him before, and he hoped to see a great deal more of him yet. (Hear, hear.) He had watched his journeyings and work in England during his tour with the greatest interest. Mr. George had referred to the opening of those mills in the handsomest manner, and, as one of the guests that day, he could only endorse what had been said with regard to extending a welcome to the new firm. They were glad that the works were not too close to London, and at the same time they were glad they were not too far off. (Laughter.) He had not had the satisfaction which Mr. George had of knowing Mr. Burroughs for a length of time. This was the first time he had met him, but he could say of Mr. Wellcome that he never knew any circle in which he moved where he was not a sort of hero. He was a favourite everywhere, and all had something to say of his very fine qualities. He hoped and believed that the new step would be a successful enterprise. (Applause). It was a business which seemed to gather the ends of the carth together. He wished the firm every success and prosperity, and with Mr. Wellcome in it he thought it could not well do otherwise. (Applause.)

Dr. CLARK, M P, said he congratulated the town on having its industries increased by the opening of that new factory. No doubt it would stimulate their trade, and the long faces that were pulled some time ago would now become short. (Laughter.) He was glad to have that opportunity of congratulating them because he had known something of the firm for some time past. They had been successful as leading scientific chemists in bringing before the medical world some of the newest remedies that had been discovered, and he was thankful to say that many drugs which were before considered horrid had by their skilful manipulation now been made pretty to the eye and as pleasant to the palate as they were pretty-(applause)-and to a very large extent was the medical profession indebted to Messrs. Burroughs & Wellcome. He felt it was almost time for them to take a back seat. He was not jealous, though he might be, but when he saw what these Americans were doing, he thought if they adopted free trade they would really have to take a back seat altogether. (Laughter.) They often found that smart people had a weakness in some direction, and the weakness of the American people was that they did not go in for free trade. He had always considered that when the American people got to that stage they would push the English people very tightly. (Hear, hear.) It had been said that this question was not political, but yet it was, in a sense. The relations between captains of labour-like Messrs. Burroughs & Wellcome-and their people was one problem that would have to be solved. They would have to find out by what means those who assisted the eaptains of labour in procuring wealth could obtain a fairer share than they had at present. (Applause.) He was glad that this firm was carrying out what he would call a wise system of selfishness, and he knew they would get more out of their people in the shorter days than they would in the longer ones. (Cheers.)

He had known Mr. Burroughs for some years past as an active, earnest moral reformer, and felt sure that anything that he could do in Dartford towards elevating and promoting the interests of humanity he would gladly do. He could also recommend to them the junior partner of the firm, Mr. H. S. Wellcome. (Cheers) The Vicar had mentioned something with regard to the needs of the local institutions—(laughter)—and seeing that these gentlemen had come over here to exploit them, he would advise those present to set about and exploit them a bit. (Laughter and applause.) He felt sure they would lend their support to

Mr. THOMAS CATLING (Editor of Lloyd's) said he felt pleasure in congratulating them upon a great work, and one which would stretch farther than any speaker had yet stated. In the planting of an industry so great in such a comfortable, picturesque, and noble position, he fancied he saw the beginning of a work that might tend to relieve the crowded metropolis; and if Messrs. Burroughs & Wellcome could succeed in proving that eight hours' work in the country would bring as good results as ten hours' in London, other employers would very soon be looking round them in districts such as that to carry on large businesses that were now carried on in London. Mr. George and Dr. Clark had recommended to them for their own personal knowledge the senior member of the firm (Mr. Burroughs), and he could commend to them from his own personal knowledge also the junior partner, Mr. H. S. Wellcome. The Vicar would find in him a faithful assistant of every good work; not only willing to extend advantages and blessings Providence had showered upon him amongst his fellow-men, but also willing to give time and trouble for the benefit of those needing his assistance. (Cheers.) He had never been over a building of that kind before where there seemed so much consideration for those who would work in it. All that would produce its own reward. (Applause.) He had much pleasure in congratulating them upon the future that was plainly before them, and ventured to assert that in twelve months' time they would hail with greater satisfaction than they did that day the appearance of Messrs. Burroughs & Wellcome in

The VICAR said there were two other gentlemen with whom he had been brought in contact from time to time, whose names he must mention. One of them was a Scotchman, the other an Englishman. The Englishman was Mr. Walter Herbert Hutton, and the Scotchman was Dr. Percy Smith. (Applause.) Both gentlemen seemed most enthusiastic in their work there, and he would say of Mr. Hutton that in season and out of season when he had called at the mills he had never found him off the spot. (Cheers.) Mr. Hutton seemed always at his post. He was only just informed that Dr. Smith was a Scotchman, and when he (the Vicar) first saw him, he at once put him down as an American on account of his "go" and manner of speech. Dr. Smith called on him one night about ten o'clock—that was his first introduction—and that showed he meant business. (Applause and laughter) If they wanted to see a proof of Dr. Smith's ability as a splendid grower of roses they should take a walk round the grounds. Only a few days before he was there and saw no roses about, but now the place seemed full of roses. (Laughter.) Dr. Smith was able to force them in a manner which had not been discovered on this side of the water, and he hoped they would be able to get a little out of him about his patent. (Cheers.)

The Rev. ALFRED STURGE said they must all feel pleased at the object which brought them together. Whatever might be their peculiar views, religious or political, or their social position, they were all there together in happy harmony. (Applause.) He was quite sure it was the feeling, not only of all those present, but also of everybody in Dartford, to give the honourable firm of Messrs. Burroughs, Wellcome & Co. a right hearty welcome. (Cheers.) They had had an opportunity of seeing what enterprise could do in a short time by the change already effected in that place, and he could not help thinking that they had reason to be thankful that these gentlemen were succeeding one who was the former captain of the place, and whose name had long adorned the building, and who had the same interest in the working classes as had Messrs. Burroughs & Wellcome. He felt sure that these gentlemen had come to Dartford to carry on that good work, and possibly to extend it. The Rev. Dr.

Cuyler (one of the delegates to the Sunday-school conference of the whole world) said the day before in London that America was a large country, and therefore the people had large ideas. If they looked up to some of the lofty trees in California it would take two men to see to the top of them. (Laughter.) When Americans started anything they said, "Go ahead," but when Englishmen started anything they said, "All right." They had there the union of the American "go-aheadism," and from what the firm had already done he thought they had the "all right." (Applause.) What they had done in other places they would do in Dartford. They did not come there to start a new business but to carry on a business which was well established. He felt sure that all would wish the firm great success-(cheers)-and in that prosperity they themselves would be great sharers. (Ap-

Mr. WOOTTON (Editor of THE CHEMIST AND DRUGGIST) said no one was more pleased than himself to be present to congratulate Messrs. Burroughs and Wellcome on obtaining that fine building for their manufactory, and also the inhabitants of Dartford on their acquisition. He had known the members of the firm somewhat intimately ever since they had been in London, now a little over ten years. knew something of the eminent success with which they had conducted their business and brought it to its present fine position, and also something of the highly honourable methods by which this success had been accomplished. The special character of business which this firm had introduced into the drug trade (and he felt sure that all members of the trade present would support this) was that while they had introduced quite as much science into it as other firms did, their goods had been brought out with perhaps a little more artistic finish than had been familiar in the drug trade-(Hear, hear.) He had had much pleasure in seeing that building, and trusted that Messrs. Burroughs & Wellcome would not only maintain their splendid success of the past but would further develop it in the beautiful atmosphere

and surroundings of Dartford. (Applause.)

Mr. E. W. GRIMWADE, of Grimwade, Ridley & Co., Liberal candidate for Croydon, joined in the general congratulations to the Dartford people upon the acquisition to their town of such a firm as Burroughs, Wellcome & Co. It had been his good fortune to have had business relations with the firm ever since the time when they established themselves in London. Every business man in that hall would be awarethat little differences would occasionally arise in business, and as a matter of fact such differences had arisen between his own firm and that of Burroughs, Wellcome & Co.; but he might say that never in his business career had he met with any house so ready and honourably desirous to settle all such difficulties as their present hosts. (Cheers.) He congratulated them on being surrounded that night by so many well-wishers, and he was especially glad to see that the Vicar of Dartford was sufficiently alive to the signs of the times to take the initiative in assisting at the inauguration in their midst of such a great undertaking as the present one, and wise enough to ally himself to such excellent employers of labour as Messrs. Burroughs, Wellcome & Co., whose presence in Dartford he would undoubtedly find of great assistance in the furtherance of those moral and religious works which he had so much at heart. (Cheers.)

Mr. John Moss, of Galen Works, Deptford, being called upon, said that he had been puzzling himself during the past half-hour as to what he would say, and he had, he thought, got together a few very nice things; but speaker after speaker, more especially the two who had preceded him, had said just those things which he would have said. (Laughter and applause.) But this he could say, that he had known the firm from the beginning, and had personally been acquainted with its members since they came to London. He had been present at the inception of the firm, had watched it with close interest throughout, and with ever increasing admiration of the thoroughness with which they did business. Their success hitherto was unquestionable, and in complimenting them upon it, he wished to join heartily in the congratulations which had been showered

upon them in making this fresh start. (Applause.)
Mr. Burroughs, who received an ovation, said he thanked those present and Mr Hesketh for the way in which they had received them in Dartford, and also their friends from abroad for the complimentary references which they had

made to their business and firm. All he could say was that they had tried to conduct their business on such a basis as would please their customers, and as would satisfy the medical profession that they were endeavouring to supply a good article at a fair price. (Applause.) They felt well repaid for all their trouble in the expressions of opinion they had heard that evening, and especially from Dr. Clark. They were also very pleased they had come to Dartford. (Applause.) They liked the town and the people very much, and he felt sure they would always be glad they had come there, and trusted the Dartford people would never have reason to regret the welcome they had given them that day. (Applause.) Their business was conducted on correct principles, and the reason why they desired to share part of their profits with their employes was because they deserved it. (Applause.) They had been faithful and attentive, preventing waste, and endeavouring to utilise everything to the best possible advantage. Such employés deserved to have a share in the profits. (Cheers.) They would be very glad to extend this system to mutual benefit and also the eight-hours system. They believed that human beings were not intended by their Creator to work all the time. (Loud cheers.) They believed that the earth was intended as a foretaste of heaven, therefore those who worked had a right to rest and enjoyment. He should leave Mr. Wellcome to make the speech. (Prolonged cheers.)
Mr. H. S. Wellcome, who was also heartily received, said

the state of his voice would not allow him to speak at any dength. He heartily appreciated the kindly feeling that had been expressed that evening by Mr. Hesketh and others, and also the kindness they had received from the people of Dartford since they first commenced operations in the town. As far as their personal interests and sympathies were con-cerned, he and Mr. Burroughs would heartily join, both as a firm and individually, in support of any local worthy objects. (Cheers.) They would feel that they had a home in Dartford, and that the interests of the people and the firm's were one. (Cheers.) With regard to their business, which had been so flatteringly referred to, many had expressed the opinion that it had grown like a mushroom, and that it could not grow so rapidly and be substantial at the same time. But by the expressions he had heard that day he thought that opinion was somewhat corrected, and the evidences they had already given to the world would bear the strongest test. (Applause.) Their business was not of mushroom growth. Its success was due to untiring toil and thought in every detail, and their chemical products had been the results of careful study and research. They did not issue experiments to the world. (Hear, hear.) They had first studied and determined the value of the products; many of the little things they issued had probably cost them months of study and toil. They had taken a very great interest in their business, and their success was due to something more than advertising, although they had not by any means neglected printers' ink. (Laughter) Then, again, there had been the application that was necessary to the establishment of any business. It was only one out of many new businesses that succeeded, and it required many days of toil and anxiety. It was like launching a great ship, and they could never tell whether it was a success until it had braved the billows. It was holding the helm through such days that tried men's souls, and they were proud of their substantial success. They felt reason to congratulate themselves (applause), and they did appreciate from the bottom of their hearts the kind expressions they lad heard that day. They were now beginning a new era in their business, and they hoped to largely increase it, especially with their additional facilities for so doing. And now he wanted to let them know why they had succeeded. They had put their hearts and souls into the business, and had co-operated with their employés. From the beginning the feeling between them and their employés had been most cordial, and they had rarely known an employé ask for increased pay. That was one of the strongest evidences that they were satisfied (applause); and as the firm pros-pered they beartily united in the fullest desire to share their profits with the employés. (Applause.) The result of this union had been that the employés had felt themselves a part of the firm, and they very often had the benefit of much of their intellectual thought. As long as employés were treated like this employers would get intellectual thought, which

would be found useful, but if they were treated as mere machines they would get nothing but merc mechanical work. (Hear, hear.) He was heartily in sympathy with the proposal to continue to share the fruits of their success with their employés, either in the form of liberal payment, or by giving them a portion of the profits. He would like the vicar to call upon Mr. Sudlow (their London manager) to say a few words. (Cheers.)

Mr. Sudlow, in response, related with much effect the story of the man who assisted in the organisation of a temperance meeting in a state of intoxication, and who, when remonstrated with, said he went as the "frightful example." He (the speaker) claimed to be not the frightful example but a happy example of the employés of the firm. He was proud to belong to such a firm, and regretted almost from what he had heard that he was not one of the staff who would remain in Dartford. He called for three cheers for the firm, which were heartily given.

The Vicar being obliged to leave, Mr. Hesketh took the

chair till the close of the meeting.

Mr. Burroughs called for three cheers for the Vicar, which were heartily given, and at the close of the meeting the building resounded with cheers for Mr. Hesketh, who suitably replied.

In the evening there was a public lecture by Mr. Henry George, this being entirely unconnected with the previous proceedings, though it was delivered in the large main laboratory of the buildings. Afterwards there was a brilliant display of fireworks, those on the water being especially admired. A portrait of Mr. George, "every feature faithfully reproduced" in fire, was a successful item in this programme. When the fireworks were over dancing began in the spacious packing-rooms, and was kept up with spirit to a late hour. Dartford people entered into the proceedings with the utmost spirit.

Trade Hotes.

A NEW illustrated catalogue of glass-bottles, earthenware goods, and various druggists' sundries has been issued by Mr. William Toogood, Heddon Street, Regent Street, W.

MESSRS. CHARLES SOUTHWELL & Co., of Dockhead, S.E., send us a copy of their monthly price-current of confectionery, including lozenges, jujubes, jellies, fruit syrups, sherbet, jams, &c., which should be useful to many chemists.

THE Franklin Institute of Philadelphia, has awarded a money premium of \$20 and a medal, derived from a legacy to the city of Philadelphia by John Scott, of Edinburgh, to A. A. & G. E. Marks, of 701 Broadway, New York, for their improvements in artificial limbs.

THE Chesebrough Manufacturing Company are introducing a new petroleum jelly, which they call "Petrolatum," by which it is intended to compete with the imitations of vaseline. They expressly say it is not equal to vaseline, but they consider it comes between that and all its substitutes.

MR. CARL WEIGAND, of Homburg Baths, manufacturer of pine products (extract, essential oil, soap, &c.), announces that Messrs. Thomas Christy & Co. have ceased to act as his agents, and that he has appointed as his representatives Messrs. Meacher & Higgins, chemists, 105A Crawford Street, Portman Square, W.

NEW COMPANY.

JAMES ALEXANDER & Co. (LIMITED).—Capital, 25,0001... all in 1l. shares, except ten founders' shares of 100l. each, Object, to acquire and carry on the business of James Alexander & Co. (Limited). tollet-soap makers, soap boilers, perfume manufacturers, &c. The first subscribers are:—
H. de Laspée, 18 Paradise Street, Lambeth; H. J. Larochc, 18 Paradise Street, Lambeth; C. Meggz, 3 Whittington Terrace, Cowes Park; J. J. Daynes, 10 Arberg Road, Bow; H. S. Davidson, 3 Circus Place, E C.; Major R. F. Croker, 35 Bedford Row, W.C.; G. A. Laughton, 11 Greville Square, W.C., each with one sharc.

TRADE "SANITAS" MARK DISINFECTANTS

(FLUIDS, POWDER, SOAPS),

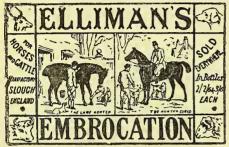
NON-POISONOUS, PLEASANT, AND BEST
Gold Medals, Calcutta 1884, Paris 1885, Antwerp 1885, Ostend 1888,

KINGZETT'S BACTERICIDES

Particulars sent on application to

THE "SANITAS" COMPANY, LIMITED, Letchford's Buildings, Bethnal Green, London.

See First Page, facing inside of front Cover, in this Issue, for latest particulars



AS TO NEW TERMS.

MEDICAL ELECTRICITY



Galvanic, Faradaic, and Electro-Magnetic
Machines and Electrodes, Galvano-Cautery and
Lighting Instruments.

Lists free. Descriptive Catalogue, 100 illustrations, 32 pages, 4 stamps.

GENT & CO., LEICESTER.

STERN'S PUMILINE

ESSENCE, EXTRACT,

JUJUBES, SOAP,

PLASTER (St. Dalmas).

62 GRAY'S INN ROAD, W.C.



THE BEST NATURAL APERIENT,

The APOLLINARIS COMPANY (LIMITED), London, beg to announce that, as numerous Aperient Waters are offered to the public with marks, names, and designations very similar to those which are used for the HUNGARIAN APERIENT WATER so long imported by them, they have now adopted an additional Label of their own, comprising their REGISTERED TRADE MARK OF SELECTION, which consists of

A RED DIAMOND.

This Label will henceforth also serve to distinguish the Hungarian Aperient Water sold by the Company from all other Aperient Waters.

DEMAND THE DIAMOND MARK.

Of all Druggists and Mineral Water Dealers. [1]

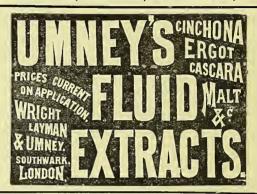
LIQUID EXTRACT CASCARA.

TASTELESS.

ONE-FOUND BOTTLES AND WINCHESTER QUARTS.

JOHN MOSS & COY

GALEN WORKS, WILSON ST., NEW CROSS RD., S.E.



[1]

PURE STARCH POWDER

In 56-lb. and 1-cwt. Bags, 26s; [3]
In 7, 14, and 28 lb. Bags, 28s. per cwt., bags included.

DELIVERED FREE IN LONDON.

G. S. MUMFORD, FARRINGDON ROAD, E.C.

SILICATED CARBON FILTERS

PATENT MOVABLE BLOCK.
See Advertisement, page 46 (bottom folio).





FRENCH PHARMACEUTICAL MANUFACTURES.

OUR Paris correspondent has in broad, but sufficiently comprehensive, terms indicated in his reports on the Paris Exhibition what there is in it of direct interest to the chemist and pharmacist. In many respects this Exhibition is beyond comparison with others which have preceded it in Paris or elsewhere, and this remark applies to the chemistry and pharmacy of the great Exposition. In these departments, however, France alone comes out strong. There are a few

creditable exhibits by English, Italian, Spanish, and Portuguese firms, and a smaller number representing the United States; but in the chemistry and pharmacy sections the French exhibits, in respect of variety and extent, leave no opportunity for other countries to compete nationally. The foreign exhibits are representative of the manufactures of individuals rather than the countries from which they emanate. The French display, on the other hand, may be taken to fairly indicate the high position, if not pre-eminence, which France has attained in these arts, which she claims with some reason to have always fostered, if not created. Certainly all will admit that the French pharmacists and chemists have produced specimens of their industries which are of exceptional interest. As in other departments of the great show, the exhibitors in the chemical and pharmaceutical products section have united in regard to the style of fixings; individualism is only shown in the nature of the exhibits, uniformity reigns wherever the cabinet-maker has played his part. This is the first lesson that the Exhibition has for pharmacists. A common plan. What a pharmaceutical phenomenon! Would that it could be applied to the perennial subjects which agitate our calling, and that we had as much hope of it as we have of the principle dominating all future exhibitions. The effect is so splendid, the result so excellent, that these factors cannot be ignored when the manufacturers of any other nation desire to show what their possibilities are. How far the French exhibits are possibilities or realities it would be difficult to say, for, as one exhibitor unblushingly remarked to our representative, all the things which are shown are not commercial articlessome are too expensive, too fine for common use. However that may be, the fact remains that the exhibits are highly creditable to French pharmacists. We may broadly divide them into three sections, and without individualising the exhibitors at present, give some indication of the character of the works which they have proved themselves capable of producing. Few British or American manufacturers have a hope of competing with French houses on their own ground as long as France maintains her present protective policy, and they have to reckon with the fact that a little more enterprise on the part of French houses would seriously embarrass British and American trade. In the long run competition as to price in medicinal products must give way to competition in quality, and in the latter respect the Paris Exhibition shows that French manufacturers have powerful resources. They have well-designed apparatus for facilitating production, an extensive and constant local demand, few retail pharmacists being manufacturers, and, what is perhaps an equally important commercial factor, a respectable number of scientific experts to pilot their industries. Take for example the department of medicinal chemicals, more especially those of an alkaloidal nature. It is observable that the names of the exhibiting firms are names which are honourably associated with many of the most important discoveries in this department, and their exhibits are in no case worthy of their reputation. Crystallised aconitine, which some pharmacists are slowly recognising as the true form of the potent article, is here shown almost by the pound in crystals, which require no microscope to tell their form. The same applies to physostigmine, the sulphate of which one exhibitor has produced, and shows in crystals about $\frac{3}{4}$ inch long and $\frac{1}{2}$ inch wide. Digitalin, in well-defined crystals, is shown by several; strophanthin, as isolated, by its discoverers, and one maker shows a dish of it, which takes the point off the remark made not so very long ago by an eminent therapeutist to the effect that this principle is not a commercial article. Synthetically made bodies—cocaine,

pilocarpine, antipyrin, and antithermin amongst them-tell us that this lightly-trodden path of chemistry is not peculiarly German. When the time comes that only chemically pure bodies will be used in medicine, we may feel sure that French manufacturers will not have to devise the ways and means for supplying them. In one exhibit we find all the alcohols which a recent research proved to be the constituents of commercial amylic alcohol, and it would seem that the exhibitor has been separating them in the ordinary course of manufacture. These examples are evidences of the capabilities of French chemical manufacturers, and there is behind them an array which substantiates the inference that British manufacturers have something to learn from their neighbours. We are insular in many things, and in nothing more than the supposition that we are keeping pace with Continental progress. The exhibitor who showed a fowl in the process of digestion, and wrote 1,000-franc cheques for the jury, will not be missed from the department which we may term the second typical representation of the present condition of French pharmacy, viz. galenical preparations. In this we do not include such things as pills and capsules, which we place third. The second section is very littlebehind the first. Concentrated liquors and fluid extracts are as much a reality in France as they are here, and, to judge from appearance, the quality is not open to objection; but it is in soft and dry extracts where the exhibitors excel. little short of astonishing to find to what a degree of perfection the manufacture of dry extracts has been carried in France. This class of preparations is practically unknown to us, but the difficulties attendant on the production of unimpaired soft extracts are not unfamiliar. There is probably no part of practical pharmacy which requires the exercise of greater care than this; the apparatus must be the best, and the supervision skilful. The machinery section of the Exhibition contains a number of evaporating vessels which certainly equal any in use in this country, and it is noteworthy that most of these are exhibited by the permission of the pharmacists for whom they have been made. In this respect, therefore, the French have nothing to learn from us, but wemay say with fairness that we can pick up a few good thingsfrom them. The remarkable feature about their extractiveproducts is the unimpaired character of their colour. Green orange-peel extract is green, red rosc petal and rhatany extracts are no darker than the drugs from which they aremade, while such extracts as ipecacuanha and cinchona are practically of the same colour as the powdered drugs. Pepsin and other digestive ferments appear from the number of exhibits to be articles of common manufacture produced by all in a standardised condition, from "20 titre" to 1,000. The art of coating pills with gelatine originated in France, we believe, and silvering is an old and much-practised custom there. Pearl-coating is cosmopolitan-English it certainly is in a superlative degree. Well, there are numerous examples of all to be seen in the chemical and pharmaceutical products section, although the French are not so great a pilltaking people as we are. They are not behind us in pillmaking, their granules, pills, and dragces of many colours and patterns show that, and we have much to learn from them regarding the production of those pilular-capsules which go by the name of perles. The credit of inventing capsules is due to a French pharmacist. The art has not developed much in the decades which have intervened since the invention, and the freedom to make this form of medication has been amply taken advantage of by a dozen or more French exhibitors, a few of whom have had to be contented with space in the machinery gallery for lack of room in the main section. In this department what is chiefly observable is the finish of the capsules and the neatness of the apparatus

for producing them. Pastilles are also a peculiarly French form of medication, and our Gallic confrères have even got tbe length of compressed tablets, but they are not yet brilliant in this department, their tablets having a dull and crumbly appearance which does not indicate excellence. In pharmacy generally, however, they have every reason to be proud of their present degree of advancement, and although the exhibits do not show the phases of manufacture, it is important for our manufacturing bouses, especially those who have colonial and foreign connections, to acquaint themselves with the quality of the goods which the French houses are able to place in competition with theirs; but even should there be no risk in this direction, the fact remains that the Paris Exhibition affords some wholesome lessons to conservative manufacturers, and many useful suggestions to the enterprising.

THE SCOTCH EXECUTIVE AND THE SALE OF MEDICATED WINES.

THE Committee of the Pharmaceutical Society which sits at Edinburgh hardly justified its existence by the discussion in respect to the sale of medicated wines which occurred at the meeting held last week. The topic is one which interests and concerns a certain number of chemists, those especially who occupy themselves with pharmacy rather as a means of getting a living than from philanthropic motives. There is some grievance of a tangible character involved, though we cannot regard it as a great one, but such as it is it is worth setting right. The Edinburgh Executive Committee could not themselves set it right, we are well aware; but that a body of chemists just elected to represent the combined intelligence of the chemists of Scotland could discuss all round a subject of this kind for an hour or two, and not bring themselves to the sticking point of adopting or rejecting some sort of motion regarding it, is not, we think, encouraging to the theory that we can always rely on practical, hard-headed common-sense from Scotchmen.

The sale of medicated wines is a legitimate part of the business of a chemist and druggist. He may or may not approve of wine as a vehicle for this, that, or the other medicine, but his opinion on that point is not asked, nor can it be conclusive. On the other band, the collection of a part of the national revenue from the sale of wines is by national consent looked upon as equally legitimate. The Board of Inland Revenue, who have to see to the collection of this tax, are willing to remit it in the case of wines which in their view are truly medicinal. In deciding the limit which divides medicinal wines from mere beverages, the Board accept the British Pharmacopæia as an authority, and allow unlicensed chemists to sell any preparation therein prescribed; but outside of that volume they judge for themselves. Except as regards coca wine we do not know that any reasonable complaint of their decisions bas been made. In requiring a minimum alkaloidal strength of one grain to the ounce for that preparation the Board insist on a poison rather than a medicine: but as taxpayers and citizens we cannot object to a fairly rigorous application of the licensing laws in respect to the sale of intoxicating liquors. Besides, as chemists can almost always get a licence and sell wines of any medicinal strength they please in England, Wales, and Ireland for 21. 10s., and in Scotland for 2l. 4s. 1d. per annum, their grievance is restricted to those sums annually, at any rate. There is no reason, bowever, wby the Scotch Executive Committee or any other body should not try to improve the conditions; what is unsatisfactory is that they should meet together and discuss

the matter and do nothing, and not even resolve deliberately on that course. Some of the gentlemen on the Executive will have nothing to do with the sale of these wines. It is not quite clear whether they bave moral objections, or whether they think the sale will barely cover the cost of the licence. But in their representative capacity they ought to suppress their private prejudices. It is certain that a good many of their constituents want to sell the wines, and find some difficulties in doing so. Mr. Maben's resolution to sell the wines when prescribed by doctors regardless of the Board of Inland Revenue is beroic for an individual, but it should not be taken as advice. The notion that a chemist and doctor between them may circumvent the licensing laws is a very unsafe and not a very reasonable one. Moreover, it has been expressly stated in this journal by the Board that the sale of spirituous liquors as a medicine and prescribed by medical men would not be permissible to unlicensed dealers.

MODERN MEDICINE-MAKING.

THE function on Wednesday, which we report at some length on a previous page—the opening of a new and very extensive pharmaceutical laboratory by Messrs. Burrougbs, Wellcome & Co. at Dartford—was an interesting, and, in many aspects, an instructive event. We are in the era of new methods, new ways of thinking, and new ways of acting. We have come to see that the perfection of a city is not the crowding of so many houses into as small a space as possible; that the river is not the naturally ordained common sewer; tbat light, air, cleanliness, and beauty are not costly things, and that they add enormously to our bealth and comfort. We are making our processes of education, apprenticesbip, art, science, philosophy, and religionall easier and more cheerful, and some people bave come to the conclusion of late years that there is no particular reason wby our daily business should be the misery and the slavery which it bad to be in the good old days. The idea was, and it is not quite dead yet, that darkness, dreariness, and discomfort were the suitable associations of Ornament, decoration, and pleasurable business life. surroundings were not only wasteful, but frivolous and suggestive of the Bankruptcy Court. Ideas in this direction have changed very rapidly in recent years. Men are competing with each other just as hard as they ever did, and getting a living is no easier a matter than it was; but we are coming to realise that, as most of us will have to spend all our days at some sort of taskwork, we may as well make our occupations as pleasant and enjoyable as possible. quently offices, sbops, and workrooms are lighter, brighter, airier, and gayer than they once were, bours are shorter, and the work itself has been made generally easier. Chemists well know that the firm, whose new works were inaugurated on Wednesday bave been noted for their advances in the direction we have indicated, and this latest move of their factory from the crowded suburb of Wandsworth to the freedom of a little Kentish Town is not unlikely to be, as one of the speakers suggested at the inaugural meeting, a bealtby sign of the times. It will be better for London and better for the workers if the great industries, of which the metropolis must always be the centre, can be more widely distributed in the country, within a radius of fifty miles. A factory with a garden round it is a modern notion, but there is no wickedness about it, and this is one of the bits of instruction by example which we learned on Wednesday.

The system of profit-sharing with the whole of the staff employed is another feature of modern business life which has been adopted by this same firm. The benefits resulting from a liberal policy of this kind are too obvious to be dwelt upon. Dr. Clark happily styled it a wise system of selfishness, and as such it may commend itself to some manufacturers who would not be disposed to be generous without the stimulus of the belief that their generosity will pay themselves. Messrs. Burroughs & Wellcome's experience of this wise system of selfishness seems to have satisfied them, and should be encouraging to others.

The lesson of most direct interest and encouragement to the drug trade deducible from the event we are noting is, we think, the irrefragable evidence it affords of the scope still offered in this trade for skill, invention, and enterprise. The business of Messrs. Burroughs, Wellcome & Co. has been in existence only ten years, and it is certainly at this time one of the most distinct objects on the horizon of pharmacy. The firm have created a standing-place for themselves in the medicine-world without pushing anybody else aside, simply by recognising the fact that the public loves to take physic and will absorb any quantity if it is only presented to them in an attractive style. So far this mysterious passion for medicine on the part of the public has only been skimmed; it remains to be fathomed; it will never be exhausted. Jacob Bell once told chemists that no temptation would induce people to take medicine until they really needed it. This was a blunder on the part of the usually clear-sighted Jacob; but chemists generally have clung to the belief. The sight of the big pharmaceutical manufactory at Dartford, with over two hundred assistants and lots of machinery at work, as it will be in a few weeks, turning out medicines which a few years ago we were all managing to do without, should suffice to explode for ever the erroneous theory.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

TH. DEFRESNE'S exhibits have been removed from the Exposition. Black paint covers the place of the name, and the show-case looks desolate and empty.

Inspecting Pharmacies.—The Paris College of Pharmacy has come in for a share of attention on the part of the Municipal Council. On motion of Councillor Faillet, the College has been invited to more frequently inspect Paris pharmacies. As the inspections are ordered and regulated by an Act of Parliament, it may be wondered what concern this is of our meddlesome Council.

The Municipal Laboratory.—Chemist Charles Girard's troubles appear not to be over yet. At the July I sitting of the Municipal Council, among several more or less hostile motions presented two were adopted, which are not quite friendly to the laboratory's present management. One censures the prefect of police for having allowed the director of the Municipal Laboratory to receive a salary from manufacturers who are, or may become, subjected to the laboratory's control. The other motion tends to a reorganisation of the concern, and contains the significant clause that "in the new organisation the head of the laboratory shall fill no other salaried position." However, a paragraph inviting the prefect of police to at once remove the present director was referred to the laboratory commission now considering the whole question.

EXPOSITION JURYMEN.—In Class 45, pharmaceuticals, chemicals, and varnishes, the jury has been completed by the adjunction of M. Levainville, varnish manufacturer, to the French quota, and the following gentlemen selected by the foreign delegations:—MM. Bergé, professor at the Brussels University, Belgium; Paul Rousseau, Brazil; Professor Newberry, United States; Washington Lastarria, Chili; Sir H. Roscoe, Great Britain; Candiani, Italy; Dr. Antonio Peñafield, Mexico; Mouradkrohn, pharmacist, Norway; Dr. Thyssen, Netherlands; Dr. Schneider, Russia; Pector, Commissioner-General for Salvador; and Dr. Lunge, Switzerland.

Alternate jurymen:—MM. Dubois, Nicaragua; Johan Fouguer, Norway; Domingos d'Oliveira, Portugal; and Dr. W. Douglas Hogg, Great Britain. The jury have organised by electing M. Scheurer, president; Sir Henry Roscoe, vice-president; Professor Riche, reporter; and Professor Jungfleisch, secretary. In Class 51, chemical, pharmaceutical, and tannery apparatus, the following officers have been elected:—M. Perret, president; Professor Schwartz, of the Ghent University, vice-president; M. Bardy, reporter; and M. Deutsch, secretary.

ANALYSIS OF FERTILISERS.—The recent law respecting artificial manures provided, among other things, that suitable regulations should be published by the administration to insure uniformity in chemical analyses and avoid contentions, when fertilisers are sold according to the percentage of useful constituents. Artificial manures are often purchased at the rate of so much for combined nitrogen, so much for soluble phosphoric acid, &c., and chemists know that to have comparable analyses it is almost indispensable that similar processes be followed. Consequently, with the advice of experts, the following rules have been set down:-(1) Nitrogen shall be estimated as follows: (a) In the shape of nitric acid; turn into nitrogen binoxide by ebullition with ferrous chloride, and measure the gas evolved. (b) Ammoniacal nitrogen; distil with caustic alkali in an ascension condenser, and titrate the ammonia. (c) Organic nitrogen; all nitrates having been removed, treat with either soda lime, and titrate the ammonia formed; or with sulphuric acid containing a little mercury, and estimate the ammonia sulphate by the ammonia process as above. (2) Phosphoric acid: (a) The total acid; dissolve the substance in hydrochloric acid in the presence of ammonia citrate to keep iron, alumina, and lime in solution, and estimate, after precipitation, as ammonio-magnesia phosphate, in the shape of magnesia pyrophosphate. When too much lime is present, separate it out with oxalate of ammonia. (b) Soluble phosphoric acid; macerate the specimen for a reasonable time with distilled water, and treat the filtered liquid as above. (c) Phosphate soluble in ammonia citrate; macerate for twelve hours in alkaline ammonia citrate, and treat the filtrate as has been said before. Note: In the three foregoing processes the phosphoric acid may be first precipitated with ammonia nitro-molybdate and then estimated as magnesia pyrophosphate, as has been explained. (3) Potash: (a) Estimate as perchlorate which is to be washed with alcohol, dried, and weighed. (b) With platinum; precipitate the potash with platinum chloride, wash the precipitate with alcohol, and reduce it with soda formiate; weigh the platinum black, and calculate the corresponding weight of potash. (c) As double chloride of platinum; wash the precipitate with alcohol, dry, and weigh it. Of course proper directions are also given for taking the samples to be analysed. And, finally, a scale of prices is established as follows. For each element estimated 10f., and for the report 25f. For one fertiliser, however, whatever may be the number of elements evaluated, the cost of the whole analysis shall not exceed 50f. To further insure the operation of the law, a number of experts have been appointed in all parts of France, who shall be entitled to 6f. for each three hours' sitting when taking samples, travelling expenses to be borne by the State.

PARIS SOCIETY OF PHARMACY.

At the meeting of July 3, Perpetual-Secretary Planchon read a communication from the Association for the Advancement of Sciences, inviting the members of the Society to attend the Congress to be held in August next, and to send delegates thereto. The invitation was accepted, and delegates will be appointed in good time.

M. Petit spoke of the National Pharmaceutical Congress which is to meet on August 8, at the College of Pharmacy, in the Salle des Actes, the very place of the present gathering, and hoped the Society would see fit to be represented. The limitation of the number of pharmacies is one of the questions to be discussed, and another is the necessity of an unofficial formulary such as is at present contemplated by the Paris Society of Pharmacy. Provincial pharmacists ask the Society to proceed with the work, and promise beforehand their co-operation and adhesion, Prof. Planchon

having observed that before sending delegates it might be well to wait for an official invitation, M. Crinon answered that, since M. Petit is the president, and he (Crinon) the secretary of the organising committee of the Congress in question, the invitation could be accepted without further ceremonies; whereupon MM. Marc Boymond, Bocquillon, and Marty were appointed delegates. The Congress, by the way, is to last one day only, although it may be prolonged,

of course, by general consent.

Another Congress, wherein the Society will be represented by special invitation, is that of Therapcutics, Materia Medica, and Pharmacology. M. Delpech remarked that recently the word "pharmacology" has been omitted from the title-name of the proposed Congress. When the project was first spoken of, the promoters took special pains to secure the support and co operation of pharmacists, sending invitations to all professors of pharmacy and noted members of the profession both at home and abroad, and having on their circulars the heading, "Congress of Therapeutics, Materia Medica, and Pharmacology." And, now, although some of the foremost members, foreign as well as French, are exclusively and distinctly pharmacists, somehow the word "pharmacology" has disappeared from the head-lines, and is only seen in the body of the circulars. He had no doubt it was only an oversight, but thought the Society's delegates should be instructed to see that the omission be corrected. No one dissenting, the resolution was adopted.

Two corresponding members were formally presented by the nomination committee, and will be balloted for at the next meeting. They are, Dr. Carpentier, of St. Quentin, France, and Senher Dom Sampayo, of Brazil. And finally an election took place for a resident member, which resulted—at the second ballot—in favour of M. Dumouthiers, after which the

meeting adjourned.

THE ROYAL AGRICULTURAL SOCIETY'S EXHIBITION.

THE fiftieth annual show of the Royal Agricultural Society The littleth annual show of the Royal Agricultural Society closed its gates on Saturday last after an unusually successful seven days' run. About 560 exhibitors took part in the exhibition in the Windsor Great Park, and their united exhibits exceeded 7,500. The great majority of these consisted, as usual, of agricultural and other machinery, but dotted all over the fan-shaped grounds were stands containing articles, the inspection of which would render a visit to the exhibition interesting from a chemist's render a visit to the exhibition interesting from a chemist's point of view, especially if that visitor happened to hail from an agricultural district. One of the sheds at the west side of the exhibition was devoted to an interesting show of all that pertains to apiculture. There were the newest inventions in beehives from Mr. J. H. Howard's apiary at Holme, near Peterborough, and George Neighbour & Sons, 149 Regent Street, W. The latter firm supply almost every requisite for successful bec-keeping on modern principles, from traps for securing bees to a special lotion for allaying the pain from stings. One of the stands contained a useful collection of specimens of bees-wax from various countries: the peculiarly faint-coloured Australian and wax from Mogador which certainly does not in the least resemble in appearance the deep orange-coloured suet-flavour wax which we are accustomed to see in the wholesale market as the product of Morocco; British wax in varying shades, mostly from Wales and Devon; and such allied substances as Japan wax, paraffin wax, &c. At some of the stands a brisk trade was done in thoney, run and in the comb. In another shed there was a remarkable exhibit of honey, sent in by the Bee Keepers' Supply Company of Melbourne, the Witherswood Apiary, Mr. Alex. Crawford, of Lyndhurst, and others. The honey, which was of fine red-brown colour, but almost lacked that strong flavour of eucalyptus oil which is so pronounced a characteristic of the article sold in London as "Eucalyptus Honey," is gathered by the bees, according to the statements of the exhibitors, on various species of eucalpytus trees, such as the red gum, and others. There is nothing in the exhibit, however, to indicate that the senders claim any particular medicinal virtue for this honey, nor, in fact, is it suggested that it contains any con-

siderable proportion of eucalyptus oil, which in fact could scarcely be expected from a product obtained from the flowers, and not the leaves, of the trees. At some distance from the honey sheds there are quite a large number of firms showing cattle foods and medicines. There was Mr. Thomas Bigg, of Leicester House, Great Dover Street, Borough, S.E., who, in addition to his dip, a [preparation which has been on the market, or shall we say in the field, for fifty years, exhibits an ingenious kind of cradle, in which the sheep are strapped down on the back and washed without being able to offer any resistance whatever. Mr. Bigg does a large trade in his dip with foreign countries, especially the Argentine Republic and in Holland, for which latter market he puts it up in stone jars of a peculiar shape appreciated by farmers there. Mr. Bigg's sheep-washes are sold almost exclusively through chemists in this country. Mr. Roger Errington, of Sunderland, also makes a speciality of horse condiments, calf-rearing meals, which are recommended as a substitute for milk in the rearing of young stock, and other cattle-foods and spices. Similar preparations were shown by Mr. Joseph Thorley, of Thornhill Bridge, Caledonian Road, N., who calls special attention to a calf-meal which he has named "Lactifer," and to his feeding-cakes, which, he states, are manufactured of linseed, locust beans, peas, lentils, &c. Messrs. Arnold & Sons, of 35 to 37 West Smithfield, E.C., had a large exhibit of veterinary surgical instruments, such as syringes, probangs, which are used for relieving cattle when choked through eating turnips, and small "guns" for the administration of horse-balls. The Banner Sanitation Company, of Northumberland Avenue, W.C., had an exhibit of their Ozo-permanganate disinfectant, which they put up in 1s. tins, or in cask, and which they recommend as an efficient and cheap disinfectant. Spratts Patent (Limited), of Bermondsey, S.E., not only showed their wellknown dog biscuits, but also various kinds of pigeon and poultry foods and quite a large variety of seeds, including canary, caraway, fenugreek, &c., serviceable as ingredients for cattle foods, &c. This firm has made arrangements with a well-known London veterinary surgeon to superintend their dog sanatorium at Larkhall Rise, Clapham, which, according to the description given of it, seems quite an ideal spot for dogs to spend a holiday or be nursed in sickness. Messrs. Raynberd, Caldecott & Co. (Limited), of Basingstoke, gave away free to all comers small samples of their prepared food for sheep and lambs. A similar kind of trade is done by Messrs. W. A. Hope & Sons, of Islington, N., and W. G. Clarke, of Limehouse. The firm of Quibell Bros., Newark, Notts, made a big show of their liquid sheepdip and cattle-wash, which they recommend as cheap, nonpoisonous, easily soluble in water, and assisting, because of the fatty matter contained in it, to feed the wool. Besides this harmless preparation they have two other washes of a poisonous character. Disinfecting soaps and such like prcparations also come within the compass of this firm's manufactures. Messrs. Corry & Co. (Limited), of 16 Finsbury Street, E.C., showed vapour cones for fumigating green-houses, for the destruction of aphides in plants, and nicotine soap, answering a similar purpose. The firm also make a speciality of the manufacture in bond of tobacco juice and powder for agricultural purposes. Messrs. Fred. King & Co. (Limited), of 3 to 6 Camomile Street, E.C., showed their wellknown Edwards's desiccated soups prepared of beef and vegetables, grown largely, the exhibitors observe, on the farms of the agriculturists who visit the show-a fact which strongly speaks for its excellence. Messrs. Holden & Co., Knottingley, Yorkshire, sell their "Magic" butter powder for preserving milk and imparting colour to butter largely through chemists. Mossrs. Stephen Pettifer & Sons, of Malmesbury, exhibit their stockbreeders' medicine-chests and cattle medicines, embrocations, drenches, and tonics. The Sanitas Company (Limited), of Three Cott Lane, Bethnal Green, E., were, as usual, prominent among exhibitors with a fine show of the popular Sanitas disinfecting fluids for washing wounds and sores of animals, disinfecting stables, yards, &c. This firm also show a nou-poisonous sheep dip, an insecticide, a disinfecting sawdust, and a number of different soaps for toilet and other uses. Morris, Little & Son, of Doncaster, as might be expected, take a prominent rank, among sheep-dip manufacturers. They have fluid dips, powder dips, and fly powders, and also bring out an innocuous disinfectant called soluble phenyle, which, unlike the Dick of

that ilk in "Sweet Lavender," will bear diluting with a large bulk of water. This phenyle may also be had in powder form put up in 6d. and 1s. tins. Jeyes' Sanitary Compounds Company (Limited), of 43 Cannon Street, E.C., are also pushing sheep dips, dog and other animal soaps, poultry soaps, and veterinary preparations; while Messrs. J. M. Jones, of Worcester Street, Gloucester, Thomas Taylor & Son, of Derby, and Henry's Indian Remedies, of 43 King William Street, E.C., showed goods of a similar character. A large and very interesting stall was that at which Messrs. Day, Son & Hewitt, of 22 Dorset Street, Baker Street, W., showed their stockbreeders and horsekeepers' medicine-chests, and their various well-established cattle medicines. For 61. 6s. one can purchase from this firm a large and nicely executed medicine chest containing an assortment of medicine to cope with almost every kind of disease in live stock, while smaller cabinets may be had at correspondingly lower rates fitted with the most generally used remedies only. A half-crown book issued by this firm under the title "Key to Farriery" will be found exceedingly useful to stockbreeders. Messrs. Henry Down & Co., Woburn, Beds., bring forward a number of cattle medicines, the particular uses of which are indicated by their names, such as ossoline, navictine, curaline, suppurine, &c. Messrs. Edward Cook & Co., of Bow, E., had an interesting exhibit of manure samples, superphosphates, nitrate of soda, &c., but we looked in vain among the exhibits of this firm for some of the soaps for which they

have acquired such a reputation. Neurasthenipponskelesterizo-as is, of course, perfectly obvious from its name—is a preparation for applying to sprains, bruises, &c. in horses. It is supplied by Mr. William Clark, of 528 Oxford Street, W., who claims to supply it to most of the large training establishments. Thomas Oldham, of Towcester, shows among his medicines a collection of dura-plastic horse-balls, which have been specially manufactured for him by Messrs. Wyleys & Co, of Coventry. Other cattle-food makers having stalls at this exhibition are, Ayre Brothers. of High Street. Hull; J. Beach & Co., Dudley; Henri's Cattle Feed Company, Hull; and Jekyll, Glasier & Co., of Lincoln. Mr. Francis Cupiss, of Diss, Norfolk, exhibited his constitution balls for horses and cattle, the excellent effect of which is vouched for in the numerous testimonials which he has obtained from a number of his customers The dose of these balls is from \(\frac{1}{4}\) to 1, and they may be either given in the ordinary way, or powdered, as a drink, in cold gruel. At Mr. Cupiss's stand is shown, as a curiosity, an enormous pebble-shaped stone, 13 oz. in weight, passed by a horse after the administration of one of the balls. Messrs. Day & Sons, of Crewe, put up medicine-chests for stockbreeders in a very similar way to those placed on the market by other makers of these goods. They also showed a number of medicines, the newest among which is Zynolix, a preparation for ringworm, which they claim to be entirely free from grease, and which they sell in 3s. 6d. bottles. This firm also issues a book entitled "The Everyday Farriery." Messrs. Thomas Pettifer & Co., of Banbury, bring out a horsekeeper's one guinea medicine-chest containing seven different varieties of useful medicines for horses, green oils, constitution powders, physic balls, &c. They also showed several low-priced medicinechests for cattle breeders. Messrs. Tomlinson & Hayward, of Lincoln, had a large show of sheep dips partly in powder, in which condition it is specially recommended for export to the colonies, South America, &c., and also in the form of glycerine dips and washes. Their butter powders and colourings still appear to enjoy the great popularity which has attached to them for quite a number of years. Mr. J. Harrison Carter, of 82 Mark Lane, E.C., was almost alone among the engineering firms showing machinery of special interest to chemists. He had quite a number of disintegrating mills in all, prices from 12% upwards, which were busily employed demonstrating their powers at the show. Mr. Harrison Carter assured us that by the close of the exhibition he would have ground at his stand over 120 tons of material, to more or less fine powder. The screens supplied with the Carter machines vary in mesh from $\frac{1}{32}$ inch to 2 inches, but they may be had as fine as $\frac{1}{64}$ of an inch. Among the materials which were being ground at Mr. Carter's stand we noticed bones, locust beans, linseed, myrabolans, sugar, several kinds of drugs, cork, leather, and hoofs, the three last named being among the most difficult materials to grind.

Mr. Carter's grinding-machines may, if desired, be had with an automatic feeder which saves a good deal of trouble in attendance. The Anti-friction Conveyer and Grinding Machinery Company (Limited), 16 Mark Lane, E.C., showed similar machinery, while the Pulsometer Engineering Company (Limited), of 61 and 63 Queen Victoria Street, E.C., attracted a good deal of attention by the exhibition of a small hand ice-making machine, "The Champion," which works without freezing powders or ice chest, and turns out ice at almost a moment's notice and at a nominal cost.

Legal Reports.

A CHEMIST'S REPUTATION.

On Monday Mr Justice Manisty and a jury, sitting at Nisi Prius in the Queen's Bench, disposed of the case of Smith v. Weller.

Mr. Willis, Q.C., appeared for the plaintiff; Mr. Finlay, Q.C., represented Mr. Weller.

The action was brought by a chemist and druggist at Egham against his neighbour, who carries on a drapery business next door, for slander. From plaintiff's evidence it appeared that he had been a chemist and druggist at Egham for over twenty years, he having succeeded his brother, previous to which he had been employed as a dispenser in the American Navy. The parties had had disputes about the right of way on some property. On June 16 Dr. Ginsberg, a gentleman residing at Egham, had a prescription, given him by Dr. Bercsford, made up by Mr. Smith. In the afternoon of the same day Dr. Beresford, who was called as a witness, overtook Dr. Ginsberg and Mr. We'ler walking to the station. They were on the platform waiting for the train when Dr. Ginsberg pulled out the bottle of medicine to show Dr. Beresford. Whercupon it was alleged that the defendant uttered the following words:-"Mr. Smith is not qualified to dispense medicine. He simply came back from sea and started as a chemist. Dr. Beresford is very squeamish about medical men practising unless they have a qualification, but he does not appear to be so particular in recommending an unqualified chemist." The plaintiff's case was that, although he had never had to pass an examination, he was duly qualified and registered, he having been in practice as a chemist and druggist before the passing of the Pharmacy Act of 1868. The defence was that Mr. Weller merely remarked to Dr. Beresford, in a chatty kind of way, "Why, doctor, Mr. Smith has not passed an examination" referring to an objection Dr. Beresford had raised to allowing an unqualified assistant of Dr. Drew's to attend in connection with the Egham Dispensary, It was denied, too, that the plaintiff had suffered any damage.

In the result the jury found for the defendant, for whom his lordship entered judgment, with costs.

GOODALL, BACKHOUSE & Co. v. MAW.

In the Chancery Division of the High Court of Justice on June 29, before Mr. Justice Chitty, the plaintiffs moved for an injunction to restrain the defendant from infringing the trade-mark of their "Yorkshire Relish." It was stated that the defendant had stamped on the bottles in which he sold his sauce the words "Yorkshire Relish," but on the labels he placed on the bottles were the words "Excelsior Sauce." These labels, however, were in appearance similar to the plaintiffs', and were calculated to deceive the public by making them believe that the defendant's was really of the plaintiffs' manufacture. Mr. Justice Chitty granted an injunction until trial or further order, and warned the defendant (who appeared in person) that until then he must not do the acts complained of.

DEFECTIVE OIL-DRUNS.

Mr. Commissioner Kerr had before him in the City of London Court on Wednesday, the case of Plant r. The Fleming Oil and Chemical Company (Limited). The action was

brought by Messrs. J. H. Plant & Co., of King Street Works, Dudley, keg manufacturers, against the defendants, a wholesale firm of chemists and oil merchants, carrying on business at 101 Leadenhall Street, E.C., to recover 61. 0s. 10d. for goods supplied. Mr. B. Plant was solicitor for the plaintiffs, whilst the defendants had as their counsel Mr. Wm. Churchill Taylor, who said that the defendants' case was a failure of consideration, as the goods supplied were useless. Mr. Plant said he could not understand this defence, as the goods were supplied on December 29, and no complaint as to the bad quality of the goods was made until January 23. Mr. T. Brocklebanks, the plaintiffs' London agent, who carries on business at 98 Leadenhall Street, E.C., said that the goods in question were drums used by the defendants in the chiman to the control of the control o defendants in the shipment of chemicals. The defendants' manager called upon him in December, and ordered a hundred of these drums, which were duly supplied on the 29th of that month. On January 23 he received a letter from the defendants complaining that the drums were leaky. He therefore called at their office, and Mr. Fenner, the manager, said that fifteen of the drums were leaky. He agreed to replace them with others, but afterwards Mr. Fenner declined to allow him to do so. Mr. Taylor said he could prove that eighty-five, and not fifteen, of the drums were leaky. The learned judge: Yes, but the question is whether they found that out within a reasonable time. Mr. Taylor said it was impossible to find it out before. The defendants had hundreds of thousands of drums in their place in the course of a year, and they were filled as required. Mr. W. Fenner, manager to the defendant company, said that fifteen of the drums supplied by the plaintiffs were first used and found to be leaky. He thereupon wrote the plaintiffs, making a complaint, and the last witness called upon him, and agreed to replace the fifteen complained of. After that interview, however, he directed the remainder of the drums to be filled, and it was then found that eighty-five out of the hundred drums supplied were leaky. He was certain that these eighty-five drums were those which had been supplied by the plaintiffs. His Honour found for the defendants, giving leave to the plaintiffs to have a jury if they chose.

Gazette.

THE BANKRUPTCY ACT, 1883.

FIRST MEETINGS AND PUBLIC EXAMINATIONS.

Griffin, George (trading as the Self-opening Tin Box Company) Mandeville Place, St. Marylebone, and at King's Cross, civil engineer—July 9, Bankrupt by Buildings, Portugal Street, Lincoln's Inn Fields; July 25, 31 Lincoln's Inn Fields.

Hanna, William Alfred Kingston, Coventry, surgeon—July 5, Official Receiver's offices, Coventry; July 22, County Hall, Coventry.

Simpson, Thornton Gerald, Victoria Road, Hackney Wick, and Hackney Road, N.E., physician, carrying on business at Hackney Road, in partnership with W.G. M'Fee, under the style of Simpson & M'Fee—July 12, 33 Carey Street, Lincoln's Inn Fields; July 23, 33 Lincoln's Inn Fields.

RECEIVING ORDER.

Okell, Eliza, Newcastle Street, Strand, chemist.

ADJUDICATION.

Okell, Eliza, Newcastle Street, Strand, chemist.

NOTICE OF DIVIDEND.

Newton, George, Newcastle-on-Tyne, surgeon-first div. of 5s. 6d., July 8, Official Receiver's office, Newcastle-on-Tyne.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Aspray, Thomas Neville, Eastbourne Terrace, Paddington, dentist-discharge granted.

SCOTCH SEQUESTRATION.

Twaddle, R., Glasgow, chemist-July 5, at 12, Faculty Hall, Glasgow.

BANKRUPTCY REPORT.

Re RICHARD DORMER.

THE bankrupt, who was an analytical chemist, at Garston, applied for the variation of an order of the court directing him to pay 181. a year out of his salary until a certain portion of his debts had been paid. Mr. Mulholland, who appeared on behalf of the bankrupt, explained that, owing to bad trade, his salary had been reduced from 1201. to 901. a year. Mr. Hilton (Messrs. Lowndes & Co.) opposed on behalf of creditors. His Honour, after hearing the arguments, directed that the order should be rescinded as from July 2.

Cricket.

S. MAW, Son & THOMPSON'S CRICKET CLUB v. PHARMACEUTICAL C. C.—This match was played at Priory Farm, Honor Oak, on Saturday last, and resulted as under:—

Pharmaceutical.		S. M. S. & T.
Kitchin, c Vicary, b Hopley	3	Frampton, b Quinton 10
D. Jones, b Robson	36	C. Jones,c Sturton, b Young 19
Quinton, b Robson	14	Robson, b Quinton &
Atterbury, b Robson	0	Buxton, b Young 1
Hughes, b Robson	0	Moring, c Bowkett, b Quinton 23
G. Jones, c Moring, b Jones	1	Vicary, rnn out 3
Young, c Jones, b Robson	0	Hopley, b Quinton 6
Sturton, b Jones	8	Masters, c Sturton, b Quinton 12
Hentsch, not out	1	Purseglove, b Hughes 5
Wilkins, b Robson	0	Pearson, c Hughes, b Quinton 3
Bowkett, b Jones	2	Laws, not out 0
Extras	15	Extras 11
		,
	83	101

A MATCH was played at Cricklewood, on Saturday last, between Barclay & Sons' C. C. and the Camwal C. C. (Chemists' Aërated and Mineral Water Association (Lim.). Scores as below:—

Camnal.			Barclay & Sons.
E. A. Doo, c Thorne, b Colema	n	3 5	Thorne, b Sturgis 1
Farbrother, b Coleman		0	B. Barclay, b Doo 0
Sturgis, b Coleman		0	Coward, not out 35
Pettit, c Coleman, b. Boyd		12	Jackson, b Farbrother 2
Pirie, b Thorne		0	H. Boyd, b Farbrother 16
Westlake, not out		25	G. R. Barclay, b Doo 4
Drew, b Thorne		1	Edmundson, b Farbrother 1
Hebb, b Coleman		3	Coleman, c Hebb, b Farbrother 1
Wells, J., b Coleman		2	Bateman, not out 0
Boakin, b Coleman		0	W. Bennetton, did not bat.
Shortreed, b Thorne		4	
Extras		6	Extras 8
		_	_
		88	For 7 wickets 68

MIDLAND COUNTIES CHEMISTS' C.C.—MARRIED v. SINGLE.
—In this match, played on Wednesday, on the Langley Ground, Small Heath, the married men easily demonstrated their superiority over their unhappy rivals. Subjoined are the scores:—

Single.		Married.	
T. Ground, lbw, b Drew	7	J. Drew, b Grice	26
F. Cross, b Drew	18	A. H. Stevenson b Grice	17
F. H. Alcock (Capt.), b Drew	2	J. G. Dewbery, b Horton	4
T. W. Chapman, c Cripps, b		A. E. Robinson, c Cross, b Hor-	
Prowse	8	tou	15
A. V. Horton, b Drew	12	R. A. Cripps, b Cross	9
W. Grice, b Drew	0	H. Jones, b Cross	4
- Lear, jun., b Prosser	4	W. Prowse, b Cross	5
H. Boucher, b Drew	0	E. A. Francis, b Cross	3
C. Ellis, b Prosser	0	C. Thompson (Capt.), b Horton	3
W. R. Hedges, jun., not out	1	F. H. Prosser, not out	0
J. H. Scumpton, absent		T. Wakefield, b Horton	0
Extra	1	Extras	7
			'
	53		93

Crade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 4.

DUSINESS in the drug and chemical markets has been of a very quiet character since our last report, and we have not heard of any very exceptional changes in prices calling for special comment. There is still a very firm feeling for Cape aloes, and camphor and fine coca leaves have also well maintained their prices. Gambier has also made a slight advance, and chlorate of potash is very firm. Cascara sagrada, Irish moss, shellac, and quinine have not altered their prices to any considerable extent. Among the principal articles which have somewhat given way in price are copaiba and Canada balsams, calabar beans, several varieties of gum arabic, honey, quicksilver, and insect flowers.

FIRE AT A WHOLESALE DRUGGIST'S.—Between three and four o'clock this (Thursday) morning, the premises of Messrs. Baiss Brothers & Co, wholesale druggists, of 4 Jewry Street, E.C., were discovered to be on fire by a policeman on duty in the neighbourhood, who saw flames and smoke issue from a window on one of the upper floors of the building. few seconds the fire alarm was ringing in the district depôt at Commercial Road East. Steamers from Bishopsgate and Shoreditch were at once turned out, and at ten minutes past four o'clock the men commenced to play on the flames, Messrs. Baiss's warehouse is five floors high, nearly 40 yards wide, and very deep, and the flames were raging through it with extraordinary fierceness. Telephone messages were rapidly dispatched to Captain Shaw at the central station at Southwark, and by his orders steamers proceeded to the scene from all the East-end stations—Hackney, Bethnal Green, Mile End, Poplar, &c .- with extension ladders and The firemen directed their hose not with any hope of saving the burning building, but chiefly to secure the safety of the surrounding premises. So closely was the fire watched, that in no single instance was an adjoining building actually attacked by fire, and by gradually surrounding the seat of the conflagration the brigade were able to subdue the flames by about eight o'clock this morning, the neighbouring huildings in which business is carried on but the Greet Town. buildings, in which business is carried on by the Great Tower Tea Company and the Berry Coffee Company, being only slightly damaged by water. Mr. Arnold Baiss, one of the partners in the firm, whom our representative found at a temporary office at No. 16 Jewry Street, hard by the gutted building, stated that he first heard of the fire at about eight o'clock this morning, when a police officer came to his private residence to tell him what was going on. By the time Mr. Baiss arrived in the City the fire was practically over, and nothing remained to be done but to arrange for premises in which to carry on the business with the least possible friction and interruption. The premises at No. 16 Jewry Street, where the office work is now being carried on, belong, we understand, to the firm, and besides this a large warehouse has been secured at 36 Commercial Street, E. of the stock, so far as Mr. Baiss knew, though he had not yet personally visted his damaged property, very little, if anything, had escaped destruction, but the safe with its contents had not been injured at all. The cause of the fire is not at present known but it was surmised that it prigned on the safe known, but it was surmised that it originated on the second floor, and the damage could not yet be ascertained. The building, with the whole of its contents, was insured in different offices. The firm had been in the building for fourteen years, having removed into it from Leadenhall Street, where their warehouse had also been destroyed by fire. Mr. Baiss particularly desired to thank his fellow wholesale druggists for the kindness with which they had

at once come forward to offer their assistance when hearing of his misfortune. The firm had not been particularly busy the last few days, and no overtime was being worked, the warehouse being closed at between 6 and 6.30 last night, when apparently all was safe. There was no one in charge at Our representative subsequently visited the smoking and dripping ruin, which was being closely guarded by the men of the salvage corps. In the basement the water had stood from 5 to 6 feet high, and was still being pumped out, while on the second floor some smoke was still issuing from the windows. The ground-floor is used as packing room and offices, the first floor as wet floor the second as dry floor, the third as tincture, and the fourth as stock floor. It is supposed that a good deal of stock is still left intact, or only water-damaged, on the top floor, but everything in the tincture rooms, where a large quantity of spirits was stored, has been destroyed, the vessels having been heard to explode about 5 A.M. The roof has not fallen in, and the floors, which have concrete partitions, are still intact, but the stone staircase collapsed, and nearly buried two firemen in its fall. The laboratory has not been much damaged, and the cyaporating-pans and other fittings are practically, so far as we could see, intact.

A RECENT official report on the trade of Suakin shows the grave extent to which trade of that port suffers by the Mahdi's blockade of the inland trade routes. Gum, in 1887 the principal article of export from the place, falls to the position of the least important one in 1888, the value of the shipments being: In 1886, 1,500%; in 1887, 5,000%; in 1888, 15%. The entire exports from the port of Suakin have fallen from 11,704% in 1887, to 4,724% in 1888; in fact, the export trade has been nearly extinguished. A considerable quantity of mother-of-pearl shell has been exported, but in other respects trade is at the lowest ebb. No cotton is grown now owing to the unsettled state of the country, and nothing comes down from the interior. "The hopes of peaceful trade," says the report, "have certainly not yet been realised, and it seems hard to understand how there can be any trade when every caravan is liable to pay blackmail on all hands, and may be stopped or confiscated altogether. The extinction of Osman Digma's power would certainly improve matters, but there is nothing to prevent any other local sheikh from extorting tithes or other imposts until there is a much more general desire for law and order than exists at present."

THE GROWING TRADE OF LIVEPOOL.—The total number of vessels using the port of Liverpool in the year ending June 30 was 22,662, with an aggregate of 9,291,964 tons, which shows an increase of 421 in the number of vessels, and 274,029 in the amount of tonnage as compared with the year preceding. The rates and dues received in the year amounted in the aggregate to 1,062,505*l*., which is 49,707*l*. more than in the preceding year. The figures quoted show that the trade of the Mersey continues to develop. In the first year of this century the tonnage of the port was less than half a million, and the duties derived therefrom 23,379*l*. Fifty years ago (in 1839) the tonnage was 2,158,691, and the duty 156,555*l*. Twenty years later the tonnage was 4,511,969, and the receipts 506,067*l*. The tonnage of the year just closed (9,291,964) is the largest on record.

In the annual competition among American drug importers to get the first lot of new crop chamomiles in stock, Messrs. Lehn & Fink, of New York, have carried off the palm this year as last, their first shipment having arrived on June 11.

A MELBOURNE report dated May 17 describes as follows the chemical market in that city:—Chemicals and drysalteries remain very quiet, the principal business being an attempt to clear out stocks and to sell consignments immediately on arrival, to save storage. The result naturally is a weak market. The only line in which any extensive business has been done has been resin, of which about 700 barrels have been sold at 71.10s., 71.15s., for F. to H. Caustic soda is lower, while a small line of soda ash has been placed at about 81. Silicate, however, is dearer, although there is only a limited demand. Cream of tartar has been sold at 1s. $1\frac{1}{3}d$.

and tartaric acid at 1s. 6d., 1s. $6\frac{1}{2}d$. Sulphur is lower, and for carbonate of soda 7s. 15s. 8l. is asked. Sulphate of copper is worth about 26l, 26l. 10s. Saltpetre has been dealt in at 26l. 10s. to 27l., and is slightly finner. Quicksilver is lower at 2s. $7\frac{1}{2}d$., 2s. 9d., there being some competition in this line, buyers not being numerous. Whiting is a trifle steadier at 3l. 15s., 3l. 17s. 6d. Some flowers of sulphur was offered on April 30 and withdrawn at 11l.

ACID (CARBOLIC).—The demand for crystals has eased off somewhat, and in crude carbolic acid business is restricted owing to the divergent views of sellers and buyers. We quote crystals in bulk according to quality at 1s. to 1s. 3d. per lb.

ACID (CITRIC).—The quotations are rather uncertain, but we would call spot price from 1s. $4\frac{1}{2}d$. to 1s. $4\frac{3}{4}d$., forward quotations varying according to the time of delivery; but holders do not seem anxious to sell in this position. Imports of lemon juice from Sicily into London and Liverpool from January 1 to June 30 have been as follows:—

1833 1884 1885 1883 1887 1883 1889 Pipes . 2,591 2,996 2,522 862 2,277 2,993 3,485

ACID (OXALIC).—Very dull at $4\frac{1}{2}d$. per lb.

ACID (TARTARIC) quiet on the spot at 1s. $2\frac{7}{8}d$, to 1s. $3\frac{1}{4}d$., according to brand. German for July delivery has sold at 1s. 3d. per lb., we hear.

ALOES.—It is reported that for good bright hard C*pe alocs 28s. per cwt. has been paid privately. The Spartan, which arrived this week, only brought 17 packages from South Africa. An arrival of 100 packages aloes, variety not indicated, has taken place from Hamburg.

ANISE.—Star-anise still very scarce and firmly held. Chilian quiet and drooping, at 19s. 6d. for fair quality. Russian is still offering at 18s. to 19s., but in Russia prices are said to be getting dearer owing to the small crop.

Antimony.—Star Regulus firm at 621. to 631.

AMMONIA SALTS.—Carbonate weak at $3\frac{3}{4}l$. to 4d. per lb-Salammoniae firm at 36s. and 34s. per cwt., according to quality. Sulphate quiet; Beckton, 11l. 17s. 6d.; 24 per cent. grey, London, 11l. 17s. 6d.; Hull and Leith, 11l. 16s. 3l.

ARSENIC remains firmly held, and is offering sparingly at 13s. 3d. to 13s. 6d. per cwt. for best white powder.

BALSAMS.—Copaiba quiet in consequence of the less limited supply. Maranham balsam is quoted at 2s. 5d. to 2s. 6d. In Canada balsam business has been done in Liverpool at lower rates, but no certain quotation can be given.

BENZOL quiet, 90 per cent. at 2s. 8d. to 2s. 9d., and 50 per cent. 2s. to 2s. 1d.

BLEACHING POWDER.—In London the market remains unaltered at 7*l*. ex-warehouse. Tyne, 6*l*. 12*s*. 6*d*. to 7*l*.

CALABAR BEANS.—Owing to the arrival of fresh supplies from the African West Coast the Liverpool market has partly collapsed, and sales have been made as low as $6\frac{1}{2}d$. per lb., but at the close there does not seem to be anything offering below 7d. per lb.

CAMPHOR (CRUDE).—There is not very much doing on the spot, 105s. per cwt. being the quotation for Japan, reweights, and this has been paid, we understand, for small quantities. For forward delivery we hear that 250 tubs Japan, July-August shipment, sold at 99s. "c.i.f." terms, and 100s. is now asked in that position.

CAMPHOR (REFINED).—Last week's quotation of 1s. $3\frac{1}{2}d$. per lb. for bells in large quantities still holds good.

CARAWAY SEED.—The new Dutch crop is now shortly expected, and in the meantime business in the article is almost suspended. *Russian* is held at 17s. per cwt.

CASCARA SAGRADA.—The -market is unchanged on the spot, and it is said that shortly after last week's auctions 1s. 9d per lb. was paid privately, although we also hear of slightly lower quotations. For forward delivery sales at 70s. per cwt. are reported, while shipment at the end of the year offers at 60s. per cwt.

CHAMOMILES.—The first samples of the new Belgian crop have arrived, but they only show imperfectly grown and dried flowers, and are no criterion as to the final result of the crop can be formed from them.

CINCHONA.—The bark auctions on Tuesday were made unusually heavy by the addition of large parcels of old Cuprea to the moderate offering of Eastern-grown barks. The eleven catalogues comprised of:—

	Packag	es P	ackage	S
Ceylon bark	1,717	of which	1,573	were sold
East Indian bark	377	"	345	,,
Java bark	163	,,	163	,,
SonthAmerican bark	1,823	,,	1,605	**
Total	4,080	"	3,686	"

It will be noticed that the auctions would have been of very moderate extent but for the determination of a few holders of Cuprea barks to utilise the present flicker of improvement in the market to dispose of their stock. It was generally thought that if this Cuprea bark was forced off for sale a decided decline would take place in the bark values all round, but this view at least was not realised, as nearly the whole of this bark found buyers at steady prices and with a fair amount of competition. The auctions, on the whole, passed off very satisfactorily, and only the decision of one or two holders to withdraw part of their bark prevented the entire supply from being sold at steady rates. Values on the whole were unchanged, though occasionally a few parcels sold very cheaply, and the unit may again be placed at from $1\frac{1}{4}d$. to $1\frac{2}{3}d$, for manufacturers' bark. The auctions included an unusually large proportion of druggists' barks. The following are the approximate quantities purchased by the principal buyers:—

		Lbs.
Agents for the Mannheim and Amsterdam works	••	173,503
" the Brunswick works		144,457
" the Auerbach works		125,753
" the American, French, &c., works	••	116,037
,, the Frankfort o/M. and Stuttgart works		60,984
Messrs. Howards & Sons		20,571
Mr. Thomas Whiffen		13,560
Sundry druggists, &c	• •	43,611
		002.400
Total sold	••	693,469
Bought in or withdrawn	••	79,873
Total quantity catalogued		778,342

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and vice versã. An analysis of the catalogues gives the following prices for sound bark:—

CEYLON BARK: Original.—Yellow varieties: Stem chips, ordinary weak, $1\frac{1}{2}d$. to $2\frac{1}{2}d$.; fairly good average, 3d. to $3\frac{1}{2}d$.; a few lots, 4d. to $4\frac{1}{2}d$.; shavings and chips mixed, 4d.; root, 3d. to $7\frac{1}{2}d$. Red varieties: chips, ordinary weak, $1\frac{1}{2}d$. to $1\frac{3}{4}d$.; fair, 2d. to 3d.; good stem chips, $3\frac{1}{2}d$.; ordinary dull to good spoke shavings, 1d. to $3\frac{1}{2}d$.; weak twigs, $1\frac{1}{2}d$.; druggists' quill, short to medium, and papery, 3d. to $3\frac{1}{2}d$.; root (a rather large proportion), $1\frac{3}{4}d$ to 3d. per 1b. Grev varieties: fair chips, 2d. to 3d. shavings, 3d. to 5d.; root, 4d. to $4\frac{1}{2}d$. per 1b. Renercd.—Red varieties: chips partly mixed with quill (a very large proportion), $2\frac{1}{3}d$. to 4d.; good quilly, $5\frac{1}{2}d$.; ordinary to good spoke shavings, 2d. to $5\frac{1}{3}d$.; a fine parcel, $7\frac{1}{3}d$. per 1b. Yellow varieties: fair to small but rich spoke shavings, $4\frac{1}{2}d$. to $8\frac{1}{2}d$.; common to good chips, $2\frac{1}{2}d$. to 6d. per 1b. Grey varieties: fair to good stem chips, $3\frac{1}{2}d$. to 5d.; spoke shavings, 5d. to $7\frac{1}{2}d$. per 1b.

shavings, 5d. to $7\frac{1}{2}d$. per lb.

East Indian Bark.—Original.—Red varieties: Chips, partly mixed with quill, 2d. to 3d.; fair to good shavings, $1\frac{3}{4}d$. to 3d.; dust, $2\frac{1}{2}d$. to 3d.; thin twigs, $1\frac{3}{4}d$. to 2d.; damaged root, $2\frac{1}{2}d$. per lb. Yellow varieties: Fair to good bright chips, 2d. to $4\frac{1}{2}d$.; fine lots, $5\frac{1}{2}d$. to 6d.; dusty root, $2\frac{1}{2}d$. Grey varieties: Small to good shavings, $1\frac{3}{4}d$. to 3d.; small weak branch, 2d. to $2\frac{1}{2}d$.; chips, $3\frac{1}{2}d$. to 5d.; thin to medium good strong quill, 3d. per lb. Renered.—Red: Common chips, $2\frac{1}{2}d$.; fine stem chips, 6d.; shavings mixed with chips, 3d. per lb. Yellow: Chips, good to fine rich,

mixed with small quill, $4\frac{1}{2}d$. to $7\frac{1}{2}d$. per lb. Grey: Chips, 6d. to $7\frac{1}{2}d$.; fair shavings, 4d. per lb.

JAVA BARK .- Original .- Yellow: Good spoke shavings, 4d.; bold quilly stem chips, 4d. to $4\frac{1}{2}d$.; good strong root, 6d. to 7d. per lb. Red: Chips, mixed with dull broken quill, $2\frac{1}{2}d$. to 3d.; dusty bright root, 3d. per lb.

SOUTH AMERICAN BARK.—The only variety offered was

Cuprea bark, of which 181,199 lbs. were sold at prices ranging from 1d. to $3\frac{1}{2}d$. per 1b. for sound bark, the bulk being sold at 2d. to 2³d. per lb. This bark was all imported between January, 1882, and May, 1883, when it might have sold at 2s. 6d. to 3s. per lb., a moderate estimate of the loss caused by the prolonged warehousing on the bark sold being 25,000%. The packages of this bark weigh from 120 lbs. to 150 lbs., and as they must have paid a warehouse rent of $\frac{1}{2}d$. per bale per week, this would amount to about 30s. per bale, while the total average price realised per bale was only about 27s. 6d. to 30s. A total weight of 27,708 lbs. of Cuprea bark was bought in. The Amsterdam auctions on July 18 will comprise about 160 tons of Para bark, estimated to yield 240,000 oz. of quinine sulphate, or an average of $4\frac{1}{4}$ per cent.

COCAINE is quoted by some of the German makers at 15s. to 15s. 6d. per oz.

COCA LEAVES.—All kinds of leaves are very scarce, and our market may be practically said to be bare of good qualities. There is only a small parcel of good Huanoco leaves available here at 1s. 2d. per lb.

COCOA BUTTER.—At the monthly auctions on Tuesday a very considerable advance on the previous sales' rates was obtained, 250 2-cwt. cases of Cadbury's brand selling at 1s. $1_1^4 d$. to 1s. $2_1^4 d$. per lb., the average price being 1s. $1_4^3 d$. per lb, as against about 1s. per lb. at the June auctions.

COPPER (SULPHATE).—The market is firm at 30l. on the spot, but for September 23l. will buy. The sudden demand which has caused the present scarcity came from France, Italy, Spain, and other wine-growing countries.

CREAM OF TARTAR.—Firsts quiet at 98s. per cwt., or perhaps even a shade less, for best white French crystals.

--During the week some business has been done in Eagle at 28s., and MM in tablets at 27s. per cwt. At the auctions on Tuesday 519 boxes were offered, but all bought in. In Liverpool the market is well supplied, and holders are rather keeping off, but some business is being transacted at about previous rates. The exports of cutch from Rangoon to all parts in the periods between January 1 and June 22 of the last three years have been as follows:—1889, 11,650 tons; 1888, 11,950 tons; 1887, 8,980 tons.

GALLS.—On the spot 67s. 6d. per cwt. is asked for China galls, and very little is offering of this variety. For arrival we only hear of small sales at the rate of 61s. per cwt. "cif." terms. At auction 35 cases Chira were bought in at 66s. to 70s. per cwt. The stock of Turkey galls is accumulating, and to sell lower prices must perforce be accepted -56s. to 50s. for blue galls, according to variety.

GAMBIER.—The market has been hardening again, with a steady amount of business in block gambier. Spot, 29s. to 29s. 3d.; May-June. 28s. rising to 28s. 6d.; June-July, 28s. July-Aug., 27s. 3d. refused. At the drysaltery auctions 352 bags blocky cubes were bought in at 43s. per cwt.

GLYCERINE steady, but unchanged in price.

GUM ARABIC.—At to-day's auctions the heavy quantity of 4,159 packages was offered for sale, nearly the whole consisting of more or less inferior East Indian gums, which met a very slack demand. A small proportion was sold at lower rates all round, excepting for fine Aden sorts, which brought high prices. White Mogadore sold at from 15s. to 20s. per cwt. decline. Ghatti also sold lower by, say, about 10s. per cwt., and Mogadore Amrad fell about 7s. 6d. per cwt. The following prices were paid:—Cape gum, very fine white sorts, 14l. 10s; good small to bold, of the ambery sorts, 6l. to 7l. 2s. 6d.; pale to brown siftings, 77s. 6d. to 45s. per cwt. Mogadore, good soft white sorts, slightly ambery and drossy mixed, 5l. 5s. to 5l. 12s. 6d.; small Mogadore Amrad, 40s. per cwt. Australian, good pale frosted, 56s.; ordinary glassy blocky pale coloured, 35s. 6d.; low block, 15s. per cwt. Aden sorts, ordinary to fair, strongly

olibanum scented, 30s. to 60s.; fine clean pale sorts, 85s. to 86s. 6d. Of 1,930 packages East Indian a small part sold, fair ambery drop Amrad, 58s.; fine soft ambery Kurraehee, 69s. to 75s.; very fine pale, 90s.; fair Oomra, 43s. 6d.; pickings, 11s. to 21s.; good red siftings, 30s.; small soft palish, 30s. to 42s.; fine, 56s. to 59s.; good white dust, 28s.; fair to good Ghatti, 28s. to 38s. 6d.; clean, 42s. 6d. to 45s.; superior, 73s. 6d.; siftings, low to fair, 5s. to 14s. 6d.; good, 15s. to 19s.; fine, 25s.; pickings, 10s. to 17s. per cwt.

GUM OLIBANUM is dull of sale, and at to-day's auctions very few good lots were sold. Pickings went slightly cheaper, at 11s. to 18s. per cwt., according to quality.

Honey.—Our market remains very quiet, and at Liverpool Chilian and Californian honeys are being offered freely, the tendency of the market being easier, if anything. II. Hackfeld has arrived from San Francisco with 887 cases Californian honey.

INSECT FLOWERS.—On account of the unusually large quantities coming forward prices have further declined, open flowers being now quoted at 80s., half-closed at 100s., and closed flowers at 115s. per cwt., "c.i.f." terms.

IRISH Moss.—The new crop is now coming in, and the first arrivals have sold very well at 12s. to 13s. per cwt., the market being altogether bare; but now that more parcels have come in 10s, per cwt. will buy.

JALAP.—Our stock here is not large, but in Hamburg large quantities have arrived direct, and prices are expected to recede.

MEDICINAL PLANTS.—It is said that Marshmallow root is likely to advance before the new crop comes upon the market, there being very little left in stock. The German crop of Marjoram herb will probably be a small one, and of stalky, undeveloped quality, the plants having suffered much from want of rain. The crop of Nareotic herbs in Hungary, which is one of the principal producing countries, has been

MERCURIALS.—The following are the present quotations for the principal mercurial compounds:—Calomel, 3s. 5d. per 1b.; Corrosive sublimate, 2s. 9d.; Mercurial ointment, 2s.; red Precipitate, 3s. 8d.; white ditto, 3s. 7d.; Blue pill, 2s.; English Vermilion, 3s. per lb.

MORPHIA.—On the spot the makers still ask 4s 9d. per oz, but for large quantities they would probably be inclined to shade that price. For autumn delivery, too, they are not unwilling to make concessions.

OIL (CASTOR) firm, with diminishing stocks, and small sales of Calcutta seconds at $3\frac{1}{2}d$. per lb. In Liverpool prices are also somewhat firmer again, closing at $3\frac{7}{32}d$. for Calcutta seconds. Large quantities of French oils have been imported recently, but they have had little or no effect on the market, as they have nearly all been absorbed in fulfilment of previous contracts.

OILS (ESSENTIAL).—Star-anise on the spot is quoted at 5s. 11d. per lb., but for arrival prices are tending easier. We hear that 5s. 8d. c.i.f. has been paid, and that there are firms who will submit even lower offers, but whether these would be accepted seems doubtful. English drawn essential oil of Almonds is still held at 25s. per lb. Oil of Cloves, Eng-1'sh, lower in sympathy with the spice. and now quoted at 4s. 6d. per lb., while oil of *Cubebs* has advanced for the same reason. The orange-flower crop has been so abundant in the South of France that oil of Neroli, rather against the general expectation, is offering cheaper. In Italian oils there is very little change, *Orange* alone being quoted higher, say at 5s. to 5s. 6d. per lb Our stock of oil of *Lemon* must be very large at present, and this article is offering very freely. Regarding Otto of Rose no definite reports have yet been received from Bulgaria, but the idea appears to prevail there that prices will certainly not be higher this season.

OILS (VARIOUS).—The following are some of the closing spot quotations:—Coecanut quiet; Cochin, 26l. 10s. to 27l. 10s.; Mauritius, 25l. Cottonseed: There are buyers for crude at 241.; refined spot, 261. to 261. 10s. Linseed steady at 21l. to 21l. 7s. 6d. Olive: Mogadore oil firm at 32l. to 32l. 10s., Spanish being held at 33l. 10s. to 34l. Palm oil: In Liverpool the market is firm, with a very brisk business. The

London market is dull at 24l. to 24l. 10s. for fine Lagos. Petroleum: American, $5\frac{3}{4}d$. to $6\frac{1}{4}d$.; Russian, $5\frac{1}{2}d$. Rape oil dearer, but closing slightly lower; brown, 27l. 5s. to 27l. 10s.; refined, 29l. Turpentine: American spirits, 34s.; French ditto, 33s. 6d. per cwt.

OPIUM.—The London market still remains very quiet, although the manufacturers are buying some seconds at, it is said, the price of 9s. 6d. per lb., and some ordinary shipping opium is being done at 11s. 6d. per lb. The druggists do not seem to be buying at all just now. New Salonica opium is offering forwards for July-August shipment at 14s. 6d. per lb., but without finding buyers.

POTASH SALTS.—Bichromate unchanged at $4\frac{1}{2}d$. per lb. Chlorate remains firm at $4\frac{1}{4}d$. to $4\frac{3}{4}$ per lb. Prussiate firm at $6\frac{7}{6}d$. to 7d. per lb. for yellow, according to brand.

QUICKSILVER.—The market has been steadily quiet since our last report, the importers still holding at 9*l*. 5*s*., and second-hand holders having gradually eased off to 8*l*. 17*s*. 6*d*. to 8*l*. 18*s*.

QUININE.—At the close of last week a good demand prevailed for speculative purposes. On the spot German quinine was sold by the makers at 1s. $0\frac{1}{2}d$. per oz., and for forward delivery the B. § S. brand sold to the extent of about 22,000 oz., July, 1s.; October, 1s. 1d.; December, 1s. $0\frac{3}{4}d$. per oz. Since then there has been great quietness on the market, and to-day second-hand holders quote 1s. per oz. for spot and 1s. 1d. for future delivery.

Rose Flowers.—Last year's crop in *Germany* and *Holland* has been a bad one, but that of the present season threatens to be equally deficient, this time for exactly the opposite reason, viz., excessive heat and drought. For *English* flowers fancy prices are required.

SENNA.—Good quality Tinevelly leaves are scarce and much inquired for.

SHELLAC.—The market opened quietly steady this week, with small sales of TN second orange at the previous wcek's closing quotations, viz., August, 69s.; September, 69s. 6d. per cwt. At the drysaltery auctions no shellac was offered, although over 300 cases had originally been advertised for sale; but towards the middle of the week the private market became firmer, and sales were made in First orange, ASSL, out of condition, at 87s. 6d. to 89s., and H in diamond, 86s. to 87s.; second orange, TN quality, 65s. (unworked); and garnet AC, 54s., and OCC, 55s. per cwt. The closing position is rather quieter in the ring, but sales of fair quantities are being made on the spot at steady prices. The following are the quotations at the "call" to-day, showing a shade more firmness than last Thursday:—

Orange TN, sellers		••	Jul y 69/	Aug. 63/6	Sept. 100 at	Oct. 71/
" buyers	••	••	65/6	69/	70/	_
Garnet AC, sellers	••	••	56/	57/	58/	<u> </u>
buvers			54.6	55/	567	_

The shipments of shellac from Calcutta to the United Kingdom during the month of June have been 2,900 cwts., against 6,100 cwts. in June, 1888. At the beginning of the present month the following quantities of shellac were afloat or landing from Calcutta:—

	U. I	Kingdom	Continent	U. States	Total
1889	cwts.	2,690	_	4,710	7,400
1888		4.250	70	4.020	8.340

Tea.—China Market.—The Moyune, with N.S. Monings, arrived in dock about three o'clock on Monday afternoon, and a few samples were shown on Monday evening, and two or three contracts made. On Tuesday the new teas were offered freely by private contract, but merchants were very firm, and dealers showed very little anxiety to buy, scarcely anything being done till after the unprotected sale at three o'clock had settled prices somewhat, quotations in sale ranging from $5\frac{3}{4}d$. for very common tea, to 1s. $5\frac{3}{4}d$. for a fair Kintuck, showing very full rates. The highest price made is 2s. for a fine Ningchow. The crop is considered fairly good—rather better than last year, but by no means a fine crop. Country buyers will, however, certainly not go into stock at anything like present rates, and the response so far has been very small. Consequently we may expect a very

quiet and dragging market for a time, till holders begin to press sales. Had there been this week anything like the pressure to sell that has been seen in the corresponding week of the last few years we should have seen low prices, and a fair trade doing. As it is, we advise buyers only to take their teas from hand to mouth. Indian sales are very small and show no alteration. Most of the tea now coming forward is New Season's, and these teas are not yet suitable for ordinary retailers' requirements—they are in many cases very hastily cured, and will not keep long. Ceylons are easy for lower grades, though the better teas are very steady, and fine to finest remain very scarce. The deliveries of tea for June show an excess of half a million pounds over June last year, Indians being about two millions in excess, Ceylon one million, while China teas show a falling off of no less than two and a half million pounds.

WAX (JAPAN).—The value of good pale squares is 45s. per cwt.

CHEMICALS IN THE NORTH OF ENGLAND.

AFTER a long period of depression, declining prices and general dulness, our chemical market has made a wonderful spring into life and activity. Orders have been coming in freely, and advanced prices have been paid, and prices still continue to advance. The impression here among certain buyers is that this sudden demand and improved state of matters have been caused, to a great extent, by the approaching meeting of soda-manufacturers in London on the 9th instant, when the important question as to the reduction of the decomposition of salt will be discussed and settled. If a reduction is arranged, then there is no doubt that heavy chemicals will be put upon a much more sound and healthy basis, as the principle hitherto has been to reduce the output of the chemicals themselves, which we believe has, to a great extent, only been done on paper; but it is now proposed to reduce the material from which the chemicals are made—a very different matter, and much more easily handled. If, on the other hand, no reduction is arranged, it is possible that the present excited inquiries may end in a reaction, which may cause a very serious decline in prices.

ACIDS.—Tartaric is decidedly better, partly caused by the greater firmness maintained by holders, and partly on account of the improved demand in consequence of the hot weather; prices are very firm at 1s. $3\frac{1}{4}d$. per lb. Citric is in a similar position, and selling fairly at 1s. $4\frac{3}{4}d$. to 1s. 5d. per lb., with an upward tendency. Oxalic is firmly held at $4\frac{1}{2}d$. per lb. Boracic is quite nominal, at 24s. 6d. on spot, with lower quotations from Italy for forward delivery.

ARSENIC is somewhat scarce, and very firmly held at 13%, per ton.

BORAX meets with more inquiry, and the demand for powdered is unusually brisk, also chiefly caused by the hot weather. Makers still quote 30s. for crystal and powdered, but second-hand lots are selling at 28s. to 28s. 6d. per cwt. Californian is dull at 29s. 6d., the American buyers having ceased to operate in this market.

COPPER SULPHATE has been in a most peculiar position for some time past; the demand is most unusual, and prompt supplies have been quite exhausted. Orders continue to pour in from France, Italy, and Spain at higher rates. The market has continued to rise from 24\ell. per ton, and closes firmly today at 27\ell, with a good demand for August at 25\ell. per ton.

LEAD.—Acetates meet with fair attention. White firm at 22l. 10s. to 23l., and brown at 19l. per ton. Nitrate is in more request at 22l. per ton.

METAL SALTS.—Iron Sulphate is gradually hardening, the supplies from Wales falling off, and we are likely to see higher prices. The quotations are, Welsh 32s. 6d., and Lancashire at 35s. to 36s.

SODA SALTS.—Soda ash has been in very steady request at 1d to $1\frac{1}{16}d$. per degree. Caustic soda is in active demand, and shipments during the past week have been of a more important character. The market has been steadily rising, and closes very firmly at 6l. 10s. to 6l. 12s. 6d. for 70 per cent.

and 5l. 12s. 6d. to 5l. 13s. 9d. for 60 per cent., and 5l. 10s. for cream. Bicarbonate has been selling freely, chiefly for India, at 4l. 15s. Soda crystals are dearer, the hot weather affecting the output, and makers are very firm at 2l. 10s. to-2l. 12s. 6d.

SENEGA, GOLDEN SEAL, AND SERPENTARIA.

Concerning the prospects of these three important medicinal roots for the coming season, the Oil, Paint, and Drug Reporter mentions that, thus far, there are indications that golden seal and senega roots will become much cheaper when the new crop begins to arrive freely, but that, on the other hand, advices from Texas favour higher than average prices for serpentaria. The arrival of new crop of golden seal is delayed by the continued heavy rains and cool weather, which have interfered with the curing of the root in those districts where the bulk of the crop is gathered. At the same time the indications are that ample supplies will soon be forthcoming, and then it is believed that the price will decline to the equivalent of about $7\frac{1}{2}d$. per 1b. delivered in New York. So far but one or two bales of the new crop have been received there, and the holders are asking comparatively high prices for it.

The fluctuations in the price of golden seal are somewhat remarkable. At the beginning of the season of 1887 the price was $9\frac{1}{3}d$. Last year the opening figure was 8d., and the highest price reached was 1s. $11\frac{1}{2}d$. The high prices in 1887 were due to a large export demand, which absorbed the supply and left the market almost bare at the end of the season. The large advance in values caused the gather. ing of a large crop last season, and as the export demand was not up to expectations, a considerable stock was left at the end of the year, the quantity carried over being the largest known for many years. It is hardly probable that the range of values this season will exceed that of 1888, as the consumption of the root in the foreign markets, where most of it goes, seems to be diminishing, while the prospects are now good for as large, if not a larger, supply than was gathered last year, the wages paid to the gatherers encouraging them to keep at this work rather than seek employment elsewhere.

The supply of senega root left over from the season of 1887 was not large, and from 1s. 3d. the prices advanced to 2s. $8\frac{1}{2}d$. last year, the highest recorded since early in the present decade. Before such large quantities of the root were found in the West, senega commanded much higher prices, at one time 5s. 4d. per lb. being paid in the New York market. Last year the supply was short, and everyone interested expected the price to go to 4s. 2d. If there had been anything like the usual demand from abroad prices might have touched this price, but, as in the case of golden seal, the foreign consumers limited their orders, and after holding up the prices here for several months, dealers were compelled to lower their pretensions gradually, and from the highest point reached there has been a drop of about 10d. per lb.

It is rather early yet to form an accurate idea of the extent of the new crop, but there seems as yet to be no reason to expect a small supply, although those who are well-informed assert that the production is annually growing smaller. At the same time, as already stated, the consumption in the foreign markets seems to be decreasing. The demand from abroad, which is usually heaviest in January and February, was almost entirely absent this year. Regarding serpentaria, about all that can be said as yet is that reports from Texas indicate a short crop and higher prices this season than usual. Already prices for the old root left over from last year are beginning to advance on the strength of these reports.

PEPPER ADULTERATION.—Mr. F. W. Stoddart states in the Analyst that steatite is still largely employed for adulterating pepper. It is added to the extent of 10 to 15 per cent. Chromate of lead, another adulterant, is best detected in the ash obtained by incinerating one or two grammes of the pepper, as the chromic acid reaction is more readily observable than is the chloroform residue.

LONDON DRUG STATISTICS.

The following figures refer to the stocks of the principal drugs in the port of London on June 30, 1889, and to the imports and deliveries from January 1 to June 30, as compared with the preceding year:—

ما مناه	Stocks		Impo	rted	Delivered		
Article	1889	1888	1889	1888	1889	1888	
Aloescs & pkgs ,,gourds Anise, Star chts Arrowroot cks Arrowroot cks Balsamscks, &c.	7,326 1,598 94 14,005 6,913 2,517	6,311 3,491 219 15,300 7,855 126	2,011 195 40 9,705 1,550 77	3,069 597 100 9,810 2,790 144	1,674 646 85 6,566 2,507 204	2,480 2,784 62 7,453 4,981 340	
Bark (Cinchona), S.American cases bls, &c. E.I., Ceylon, and Javacs bls, &c.	483 35,664 690 27,989	62,023	9 5,125 863 32,264	- 35,656	32 3,734 772 26,187	33,150	
Boraxpkgs Calumba, Camphor, Cardamomschts Cocc. Ind. bgs, &c. Cream of Tartar cks	587 1,492 363 1,613 295	1,742 2,671 3,105 965 503 15	206 1,346 2,178 —	518 988 5.233 1,741 454 10	37 558 1.910 1,143 54	11 969 4,106 1,517 237	
Cubebsbgs Dragon's Blood chts Galls, China, &c. cs Turkeysks Gums— Ammoniac pkgs	100 188 2,048 5,735	76 66 4.735 4,449	249 162 1,594 6,645	122 87 8,038 5 ,359	273 54 1,671 3,627	159 100 5,003 3,967	
Animi & Copal pkgs Arabic, Asafætida, Benjamin,	5.463 24,938 749 2,198	5,752 15,702 451 2,054	4.058 18,435 828 1,731	5,543 15,374 257 2,005	3,563 13,032 428 1,420	62 4 211 10,822 256 1.509	
Damar , , Galbanum , , Gamboge , , , Guaiacum , , Kino , , Kowrie tons Mastio pkgs Myrrh , , ,	3,542 4 119 68 113 1,430 43 483	2,649 115 32 117 1,235 112 509	4,209 4 148 101 37 1,475 26 163 6,786	1,992 116 3 66 1,535 44 281	3,198 122 49 11 1,416 14 225	2,761 107 48 25 1,134 29 326	
Olibanum . ,, Sandarac . ,, Tragacanth ,, Indiarubber, E.I. tons Madagascar . ,, S. American . ,, African, &c ,	5,394 903 9,126 233 48 76 536	5,993 1,395 6,595 404 45 150 585	654 6,889 219 96 127 268	6,371 1,088 7,286 393 69 175 467	4,090 508 3,499 317 75 102 309	4,295 742 2,597 244 49 139 467	
Ipecac cks & bgs Jalap bls Lac Dye chts Myrabolans tns Nux Vomica pkgs Oils— *Anise cs	481 70 5,790 8,473 341	45 115 6,793 8,983 543	814 - 5,366 361 199	224 66 	361 17 90 4,548 1,137	301 102 356 6,294 824	
Castior cks Castor cks Cocoa-nut tns Olive cks, &c. Palm tns Opium chts, &c. Rhubarb. chts Safflower bls	65 617 3,319 2,124 853 35 1,335 918 571	106 704 11,720. 2,336 974 254 1,557 1,057	179 284 2,050 2,560 2,480 57 367 690 32	128 251 9,633 2,604 1,443 124 314 659 43	106 131 242 5,739 1.818 1,937 82 649 695 51	111 124 438 5,428 2,034 1,148 78 862 829 247	
Sarsaparilla bls Senna bls, &c. Shellac, Orange chts, &c. Garnet	353 1,257 47,490 17,074	628 1,274 52,764 18,656	695 761 12,500 6,231 3,410	783 955 26,392 7,797	722 1,402 11,734 4,366	652 2,197 15,666 4,032	
Button, Totalchests Sticklacchts, &c. Gambiertns Cutch, Turmeric, Vermilion, chts, &c.	71,368 3,873 601 3,401 2,867 16	82,473 4,254 803 2,575 3,413 34	22,141 950 4,532 2,404 242 £4	4,157 33,346 695 4,689 3,376 1,414 37	4,438 20,538 904 5 090 2,264 601 90	4,262 23,960 821 5,710 1,756 623 66	
Wax, bees' bls & srns , cks & cs , cakes Wax,Japanpkgs	351 1,106 135 942	415 1,614 3 1,433	250 1,811 201 209	124 1,261 24 1,312	425 1,752 81 719	3(8 1,336 791	

^{*} The stocks of anise and cassia oils, if any, at Smith's Wharf and Brower's Quay are not included in these figures.

Mix a



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

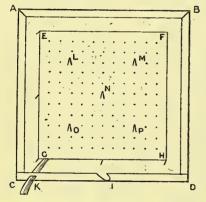
Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c. will be attended to in the order received.

Washing Measures.

SIR,—I am a lazy man, and like most lazy men take the most trouble. I have been frequently troubled by the difficulty of quickly washing off measures and mortars sticky substances, such as thick mucilage, sugar, &c., without using a brush and wetting the hands, and a single rinsing did not get the measure clean; so I made a measure washer, and for the benefit of your readers I enclose rough sketch. It washes five measures at once, is very convenient, and a great saver of time; it could of course be made to take any number of measures, but my water-supply was only sufficient for five at a time:—



A B C D is a zinc tray 13 inches square and 1 inch deep. E F G H is a sheet of perforated zinc, standing on short legs ($\frac{3}{4}$ inch long).

I is the outlet for waste water.

K is a lead pipe $\frac{3}{4}$ inch bore running. On bottom of tray, under perforated zinc, and branching into five pipes, which terminate in the jets L M N O and P, through the perforated zinc. The jets stand up above the drainer $1\frac{1}{4}$ inch.

It is connected to the tap by a rubber pipe. I made it for less than 3s. 6d., and find it saves a great amount of time on

busy dispensing days.

P. V.

Dispensing Conveniences.

SIR,—A most useful and time-saving convenience is a little muslin sieve for small quantities of powders. I am surprised that sundriesmen do not offer tin, wood, or earthenware rings, for making strainers or sieves. A series of such rings—of sizes to fit on beakers, mortars, &c.—could be sold for a few pence, and would be very much valued by the dispensing chemist.

I use muslin, of various degrees of fineness, to tie over the flange of the rings, and stumpy bristle brushes for rubbing the powder through. One brush is kept for dentifrices, another for rhubarb powders, and another for such things as bismuth. Muslin is cheap enough, and need not be spared.

Yours truly.
HEDER. (75/42.)

Scented Cigarettes.

SIR,—In reply to your correspondent, (27/23) "Pendletonian," the following is used by a large maker of scented cigarettes, in the proportion of \(\frac{1}{4}\) oz. to 1 lb. of the tobacco:—

Fine cedar wood					2 oz		
Orris			٠.		6 ,,	,	
Ess. white rose					6 dı	rachms	
Aq. lavand					4	19	
Ol. geranii opt.					40 mi	in.	
Carmini					q.s.		
and keep one month	befor	re use.		Tu	LIP.	(78/30.)	p

Decomposition of Chlorates.

SIR,—Your note on explosives (April 13, 1889) recalls are old experiment of mine, which I think is calculated to throw some further light on the eause of Chartier's copper becoming acid. If 3 parts of chlorate of potash be ground and mixed with one part of chloride of ammonium a composition results which ignites to flame and burns away gradually, giving off dense acid fumes of a yellowish tinge. The addition of 3 grains of powdered myrrh or common resin to each ounce favours combustion, but is unnecessary if the materials be dry. If nitrate of ammonia be substituted for the chloride, the fumes given off consist purely of nitric acid vapour—

 $3NH_4NO_3 + 4KClO_3 = 6HNO_3 + 3H_2O + 4XCl.$

This decomposition ensues spontaneously after a few weeks. A pretty experiment results from the following formula, an artificial coralline being produced:—

Chlorate of potash 3 oz.
Chloride of ammonium . . 1 ,,
Powde ed myrrh 12 grs.
Gum acacia mucilage q.s.
Form into pastules. When dry, ignite.

These burnt in a room proved serviceable in a case of slight-hemorrhage, but perhaps the form yielding pure nitric vapour would be more suitable for inhalation. Made with nitrate-of ammonium, however, the pastilles do not burn readily. They fuse and go out, unless some addition be made to the composition of an absorbent character. Oxide of iron gave good results.

Petersham, N. S. W. E. PORTER.

The French Wound-stone Lotion.

(The Original Recipe.)

SIR,—The following may be useful. The preparation is popular among the trainers at Newmarket. I have copied the recipe *verbatim*:—

All powdered fine, and mixed together, and melted in a pipkin over a slow fire, stirring them well together with a stick till they are dissolved; then set them to cool till the next day; then break the pipkin to get it out—it is as hard as a stone. Break the same into small pieces, and stop it down in a bottle or jar to preserve it from the damp and air. A piece the size of a walnut put into a quart of water will be quite strong enough. It is good for every external application, for galls or pinches of the saddle; good for the legs after firing, cures over-reaches in the heels, bruises in the legs, the canker in the mouth and in dog's ears, cures the mange in dogs. It is used as a sure cure in cuts, bruises, burns, and scalds. Applying it with bandage of linen it instantly dispels chilblain eruptions, both in man and beast; when diluted more with water is excellent for the eyes. It possesses only one objection—it ironmoulds linen.

This recipe was brought over from France before the Revolution and made public at the Pavilion at Brighton, and was purchased by Louis XV. for 10,000 louis d'ors, and then dis-

posed for the public benefit. Saffron Walden.

HENRY MACHON.

Blaud's Pills.

SIR,—In the issue of June 22 of your honoured journal, Mr. Lamhie asks for directions regarding a practical method of making pil. Blaudi; I therefore send a formula, which is superior to any I have tried. The pills can be kept in stock, with excellent result, and do not hecome soft or adhere together. I have had them standing for long periods in a closed hottle, and there was nothing of the usual oxidation to remark:—

Kali carbonic. puri pu'v. 90 grammes
Ferri sulphuric. siec. pulv. 50 ,,
Glycerini (circa) 40 ,,
F. pil. No. 600, serventur in vase vitro.

I remain, sir, yours truly,
Otterup,
A. von Conor-Carolsfeld-Krause.
Denmark, June 29.

Bemrose's Guide to Paris.

SIR,—As I have just returned from a short visit to Paris, during which my "Guide," through your advice, was that published by Bemrose, and offered gratis to the trade by Messrs. Burroughs, Wellcome & Co., permit me to say that I found it of the greatest use and most convenient for reference. The advice given in regard to hotels and restaurants is, as far as my experience goes, thoroughly reliable, and the information given regarding the sights of the gay city adds greatly to the interest when one pays them a visit. My only regret is that I did not have the "Guide" for a week or more before I left, so that I might have studied it well before, and for that reason I would advise my brother chemists to secure their copies in good time.

PHARMACIST. (29/86.)

A Quarter of an Hour with a Jury.

A correspondent writing from Paris says: -One of the least frequented spots of the Exhibition any time when the inner man does not tempt the natives of perfidious Albion to draw near to Baker's hakery, or the Bovril heef-tea stand, is that section of huildings devoted to food products. The little railway of open cars runs past it, and perhaps that accounts for the sparse attendance in the section. This at all events was my thought as I sat the other morning on a codfishing hoat in the Norway section trying to admire salt cod and other dried fish around me. I had counted about twenty exhibits of cod-liver oil, and although ten o'clock had just struck, the powerful Parisian sun was melting me fast. A sympathetic thought went out to the Norsk oil makers. If I was suffering, what could these poor inanimate oils he? Here was a beautifully pale sample of ol. morrhuæ; for absence of colour I could have desired no hetter, hut the odour——! I could not give a tip to an attendant, for there was none about. I could only pity the men who had so exerted themselves in the hope of a favourable decision from the jurors. Suddenly the last named gentlemen came on the scene. There were ahout a dozen of them, all respectable enough looking men, with hadges of office showing their importance, and if these had not awed me the sight of colossal note-books was sufficient to make my heart sink into my hoots. How clever they must he, thought I, if they can judge the quality of these sun-simmered cod oils! Splendid are they now for boots; hut the pity of it, should Dr. Dohell have to include them in his medicines for consumptives! Watch these men, however. Here is one, a fat, surtouted gentleman, of 40 or thereby, whiskers cut in hest Parisian fashion, nose made for smelling; it is he who draws the corks and takes the first suck of the stopper or sip from the oleaceous liqueur glass. He has got all the specimens together from the court, and with frightful grimace or artistic twitch of the upper eyelids indicates his disgust or approval of the specimens. An old and professional looking gentleman, spectacles on nose, listens to his whispers, takes the second smell and sip, and passes on the specimens to another with voluble remarks regarding their quality. The rest look on, one or two showing by their countenances that they are glad to he out of the tasting lot, others, apparently, undecided whether to approve or otherwise of the whole proceeding. I cannot help noticing that a handsome cut gl-ss

hottle is tapped once and once again, and that a modest 2s. hottle, with gay crimson-printed lahel, well-nigh succeeds in converting a nose of Napoleonic aspect into one of the impertioent retroussé type, which sniffs at everything and nothing. Well, the taste was not a pleasant one, I should think. Few mortals are those who have the courage to sandwich cod-liver oil tasting hetween hreakfast and the mid day meal of a hroiling summer's day; fewer still, I would have thought, who would care to taste the sun-simmered stuff, hut when a Paris Exhibition jury does, who may not? It is too hot. I am afraid to search for the moral of this little tale. This exhibition, like every other which Ihave visited, is chiefly noted for the fact that the exhibitors are anxious to get the highest award. I pity the Norwegian ccdliver oil makers, and shall look round in that section in a day or two to see if the gold medal has not gone to the shadecovered case, and the lower awards to those exhibits which have had the good fortune to he cooler than their neighbours. And in future I fear that my appreciation of gold medals will undergo alteration, while my respect for exhibition jurors must become extinct.

The Patent-medicine Trade.

SIR,—Chemists and Druggists will, I am sure, appreciate the efforts now being made hy some of the proprietors of patent medicines to put a stop to the ruinous low prices at which they have heen sold during the last few years. But the several schemes now on their trial do not appear to me to meet the case, and I would heg, through the medium of The Chemis Fand Druggist, to offer a few suggestions for the consideration of the trade.

Proprietors seem to overlook the fact that the retail chemists and druggists are undersold hecause they offer large buyers lower prices and larger discounts for quantity. The stores and large cutting-houses take advantage of this, and are enabled to sell retail at wholesale prices. They buy at the same prices as the wholesale houses from which the retail chemists and druggists have to huy. Take, as an instance, the new prices and discounts advertised in The Chemist and Druggist of March 2 for Ridge's food.

For quantities such as a retail chemist and druggist would huy the price is 10s. per dozen net, hut in larger quantities the price is 10s. with 10 per cent. or 15 per cent. This enables the stores or cutting-houses to sell at 9d or 10d, which the chemist cannot do, and so his trade is taken from him, and in self-defence he has to sell another make of food, or put up one of his own. And perhaps, in no department of his trade has the chemist a hetter chance of doing so than this; for, hefore the mother decides which food to give her child, my experience is that she consults her chemist, and, as a rule, he controls her choice; and my opinion is that it would he hetter for Mr. P. J. Rumney, and hetter for the retail trade, if he sold in any quantity at 9s. 6d. or 10s. a dozen, and gave no extra discount to large buyers. Other firms might be named, but to save space the ahove shall suffice as an illustration of the writer's ideas.

In the report of one firm only—Messrs. Barclay & Sonsgiven in the THE CHEMIST AND DRUGGIST for March 23, 1889, the profit for one year is given at 5,102*l*. 15*s*. 9*d*. This could all be saved, or divided hetween the proprietors and the chemists and druggists, if the proprietors of patent medicines, &c., would supply retail chemists and druggists in small quantities direct at lowest prices; and *l* think I can give some good reasons to show that to do so would not only benefit the retail chemists and druggists, but the proprietors of patent medicines, &c., as well.

I think full prices for patent medicines have gone, and gone for ever, and I would suggest that all proprietors advertise at prices less the stamp duty, that is at 1s., 2s. 6d, 4s., &c., &c.; then that they raise prices—say for 1s. $1\frac{1}{2}d$. articles to 10s a dozen, 2s. 9d. articles 20s. a dozen, and so on, and sell at these prices to the trade in any trade quantity to he arranged, and give no reduction or discount to large huyers. This would make all equal in the trade, and the margin of profit would not tempt the cutting houses to undersell.

It should he insisted that with all orders cash must be enclosed. This would save any loss hy had dehts, and the advanced prices would more than cover the extra cost of lahour and office work to the proprietors through sending

out their goods in smaller quantities. Proprietors would also reap two other advantages—a much larger quantity of their goods would be stocked by the hundreds of chemists and druggists who would become their customers than are now stocked by the few wholesale houses; and the retail dealer would take a much greater interest and pleasure in selling goods bought direct from the proprietors, and he would be anxious to increase his sales to make his orders as large as possible. At present it is the custom in many chemists' shops to substitute something of their own puttingup when a patent or proprietary article is asked for, and no doubt this is often done; but if the supply came direct from the proprietor this practice would gradually die out, especially when the article asked for gave a fair profit. My own experience is that, except in the case of a few of the largelyadvertised proprietary articles, we sell in a much greater proportion those we buy direct. Another experience of mine is that the sale of those articles has been the shortest-lived which have been made a bait of by the cutting-houses. Like the over-trained horse or the forced hot-house plant, it has soon been over with them. Warner's safe cure and hop bitters have been sold in this neighbourhood at 3s. for a 4s. 6d. bottle; now we seldom sell either.

Снемізт. (80/64.)

SIR,—I am very glad to find that chemists are beginning to stir themselves in reference to this grievance. My impression is that it is a gross injustice towards us as a body, not only robbing us of a portion of the small profit obtainable, but effectually putting a stop to any attempt to meet store prices, except at a loss. Who ever heard of wholesale houses being dictated to as to the discount they should allow?

The makers may take upon themselves the credit of expending large sums in advertisements, &c.; but what, may I ask, would they have done in years gone by without the aid of the chemist, and who else have they to thank for their

wares being so popular?

The plan I adopt, and would suggest in such cases, is this: No sooner does the announcement of advance appear thau I at once cease stocking that article, even if oue of the most popular of the day. I destroy all counter bills and other advertising matter connected therewith, and if I have no similar article by another maker to recommend in preference, I prepare one of my owu.

True, some customers are at first a little prejudiced, but this difficulty is overcome by begging them to accept gratuitously a sample bottle or packet kept conspicuously displayed on the counter for that purpose. This is never refused under any circumstances, and invariably leads to

good results.

AN OLD STAGER. (78/31)

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Ipecacuanha Pills.

SIR,—What is the most suitable excipient for making up the following pills, so as to get them as small and as presentable as possible?—

A Quinine Mixture.

SIR,—During the past few weeks I have several times had occasion to dispense the subjoined prescription. The only way in which I have been able to make a satisfactory mixture is as follows:—Dissolve the potassium citrate and potassium iodide together in a portion of the chloroform water, then add the Fowler's solution and glycerine, lastly dissolve the citrate of iron and quinine in a little more water, and mix the two together. Dispensed in this manner I get a perfectly

clear mixture, but if dispensed in any other way I cannot possibly get a satisfactory result. Do you consider the way I dispensed the prescription to be correct, and can you explain the action of the glycerine in this case?

[The course adopted was the proper one. Glycerine, like mucilage of acacia, has the property, when added to one of two solutions which mutually decompose each other, of retarding or preventing the decomposition when the solutions are mixed.]

A Morphia Mixture.

SIR,—I had the following prescription handed in from a local doctor to dispense. What ought to be done? The morph, mur. will not dissolve in the menstruum, and it seemed dangerous to send the mixture as it was—the dose also being near the maximum. Should I be justified in sending it as it stands, or with addition of muc. trag. 3ij.? I consulted the doctor first, and he said he had frequently dispensed it as written, but ordered half the morphia.

Morph, mur. .. Spt. ammon. arom. .. Æther. chlor... 3iss. Tr. card. co. 3ij. .. Spt. æther sulph. co... .. 3j. Chlorodyni .. ., Aq. menth. pip. ad 3ij. .. 3xii.

3ij. before meals.

Yours,

A. McDougall.

[The hydrochlorate of morphia is quite soluble in the amount of water ordered, but is precipitated on the addition of the aromatic spirit of ammonia. Mucilage of tragacanth would be an objectionable addition; $\frac{1}{2}$ oz. of acacia mucilage is better, and ensures ready diffusion of the morphia. But this addition should not be made without the sanction of the doctor, who, being local, is easy of access. As to the question about the dose of morphia, this is a matter which the dispenser must settle with the prescriber. The dose in this case is unusual, and the fact that the prescriber reduced it by one-half shows that our correspondent was wise in following the commonly-observed rule of consulting the prescriber when it appears necessary for the safety and comfort of the patient.]

LEGAL QUERIES.

Sal Volatile.—Mr. W. F. Haydon is circulating the subscribers to his agency with the advice that, as the term "sal volatile" now appears as a synonym in the British Pharmacopæia, they should invariably supply the preparation made according to the formula there ordered, both in dispensing and general trade; or if they still continue to supply an article differing therefrom, they should make the fact known on the labels covering the same. Mr. Haydon appends the following opinion on the point, obtained from Messrs. Glaisyer & Porter, the solicitors to the agency:—"With reference to the recent sal volatile case, and the larger question involved in Mr. Vaughan's decision, we are of opinion that the British Pharmacopæia has, by virtue of the various Acts of Parliament which relate to it, been constituted the standard for all medicines which are named in the original British Pharmacopæia of 1867, or any republica-tion of it under authority. It seems to us clear that the authority of the Pharmacopæias of London, Edinburgh, and Dubliu is destroyed for any medicine named in them which appears in a duly published edition of the British Pharmacopœia, and that whether the uame so appears as a principal title, or only as a synonym. The intention was to supersede these earlier Pharmacopæias, at all events as to all medicines found in the newer work, and they cannot therefore be relied upon as authorities where it appears that the preparation they order has been superseded."

30/36. Spratling asks:—"Can a person soliciting help (in a case of distress), having a petition signed by a minister or magistrate, be taken up for begging if she acts honestly in reference to the petition?" [The Act governing begging is 5 Geo. IV., ch. 83, ss. 3 and 4. Under section 3 a person wandering abroad or placing himself in any public place, street, highway, court, or passage to beg or gather alms is liable to fine or imprisonment. Under section 4 a person endeavouring to collect alms under false pretences can be similarly convicted. There is no law, however, to prevent a person soliciting help by petition in a case of real distress, so long as the person does not bring himself or herself within either of the above sections. A magistrate would not be justified in withholding the petition in a case where the charge broke down.]

24/26. James has bought glycerine for forward delivery The firm from whom he bought failed. "James" had sold on the strength of his contract, and will now have to buy at a higher price. Can he compel the trustees of the estate to fulfil the contract, or can he claim on the estate? [If there is a binding contract between "James" and the bankrupt, then "James" is entitled to prove in the bankruptcy for any damage he may have sustained. The damage in this case would be the excess of price paid by "James" in purchasing glycerine to replace that ordered from the bankrupts, together with any expenses necessarily incurred. "James" cannot compel delivery of the goods by the trustees in bankruptcy, as it is only in respect of land or some chattel (as, for instance, a valuable picture), which cannot be bought in the market, that the courts will decree specific performance of a contract.]

37/40. Durham.—The announcement you quote would be an infringement of the Pharmacy Act. Give particulars to the secretary of the Pharmaceutical Society, 17 Bloomsbury Square, W.C. Proceedings can only be taken by the Society.

80/41. D. M.—You can probably get a form of application for registration from your post office; if not, you must get it from the Trade Marks Office, Southampton Buildings, London. The application will cost 5s.; if accepted, a fee of 20s. is charged for registration; if not accepted, your 5s. is lost. For fuller details see THE CHEMISTS' AND DRUGGISTS' DIARY for 1888.

MISCELLANEOUS INQUIRIES.

Ephemera (75/24), whose black aniline ink we mentioned last week, says his formula is simply 1 oz. aniline black dissolved in 30 oz. boiling water.

73/7. Assistant.—Each of the American States where a Pharmacy Law exists has its own examination, and there are no doubt variations in degrees of severity among these. They all more or less resemble the Minor examination. In most, if not all the States, a course of study at one of the recognised colleges of pharmacy is an essential condition.

74/46. W. H.—If you consult our advertising pages you will find what you want.

73/65. Gemini.—It is impossible to say what the ointment contains. Moreover the evidence of its value is not very strong.

22/35. W. H. J.—(1) We never heard of a hair-wash containing gelatine. Any appreciable quantity of the latter would make the hair sticky. (2) Tincture of Perchloride of Iron is generally more acid than the liquor, because it undergoes decomposition with formation of ferrous chloride, and reduction or chlorination of the alcohol. These changes may account for a mixture containing the tincture and dilute phosphoric acid remaining bright, while one contain-

ing the liquor and acid becomes muddy, ferrous compounds being more soluble than the ferric. (3) Thanks for your items.

74/44. M.—Ointments containing acetate of lead and oxide of mercury become grey owing to the reduction of the mercury by the lead salt. Your Eye Ointment is in this respect a bad one, moreover benzoated lard should not be used for eye ointments—the benzoin irritates the eyes. The following formula provides an ointment which is perfectly safe and useful:—

For old wounds and indolent ulcers, a mixture of 1 part of red precipitate ointment and 7 parts of zinc ointment is often efficacious.

74/37. Dukery.—Nitro is commonly added to cornedbeef pickle, as well as salicylic acid. The nitro has the effect of bringing out the red tint. For white ink consult the index

76/17. Chemist's Assistant.—Chiropodists are not examined persons or diplomaed in any way.

76/48. Duboisine.—There is much in what you say, which supports what we have repeatedly urged without going into detail.

76/21. J. W.—(1) Mildew in Vines.—Bouillie Bordelaise is largely used for this disease in France. It may be made by dissolving 4 oz. of sulphate of copper in half a gallon of water, and making a milk of 4 oz. of lime in the same quantity of water. Mix and use the mixture for brushing over the vines. (2) If you look up the index you will find references to formulæ for brass lacquer.

76/22. R. W.—You should communicate with a nurseryman or seedsman. It is not usual to propagate hops from seeds, but from cuttings, or old "stools" with two or three eyes.

76/33. W. T. Martin.—There is a section on wood-stains in the Diary.

75/48. H. P. Scott.—Write to the makers. The occurrence may be due to some flaw in the packets.

Spirit of Vitriol.—J. P. R. (75/15) writes that when he was in Nottingham, between 1854 and 1870, acid. sulph. dil. was "spirit of vitriol."

76/7. Glucose.—Not knowing the composition of the lozenges, it is impossible for us to say why they should become blue on exposure to the air. That circumstance would justify you in asking the maker for an explanation, and even in returning them.

32/21. Arthur.—Essence of Vanilla.—This is made of the best flavour by long digestion of the finest vanilla in a weak spirit. Try the following formula:—

75/7. Huddersfield.—We get a good emulsion according to the directions, without separation of the oil, except in an

emulsified condition. If the acacia is of poor quality—and there is much of that kind in the market—the emulsion may not be perfect. Your procedure was correct, but you cannot expect to become expert without practice.

78/44. H. O. W.—You will find what you want in the "Art of Dispensing."

78/22. Medicus.—Cocaine and morphine are frequently prescribed together, and are not physiologically antagonistic.

79/73. Ferrum.—We have not a formula for a solution for removing rust from iron by immersing it in.

(79/34) Shah and (77/34) Attraction.—As recently intimated, we cannot undertake to analyse and report upon such specialities as you send us.

75,6. Nomen.—"Housemaid's knee" is generally treated by tincture of iodine being painted on daily. This application is suitable generally when the swelling is hard and painless. When there is inflammation it should be treated with hot fomentations.

79/72. Medicine.—"To gain a thorough knowledge of the action of medicines," so far as that is possible without going through the medical course, you cannot do better than read Dr. Lauder Brunton's "Materia Medica and Therapeutics" (Macmillan, 21s.). For counter-prescribing, Begbie's "Medical Information and Advice" is useful.

79/54. Argyle.—The statement that blue litmus-paper exposed in the air of a house will tell whether the drains are defective or not is obviously erroneous. A little oil of peppermint poured down one of the sinks is said to be a good means of detecting any flaw, as the odour of the peppermint after a time permeates the rooms; but we should not rely on that, and advise you to call in a certificated plumber or sanitary engineer.

75/25. J. L.—The antiseptic lotion you refer to was found by us to be an aqueous solution of chloride of magnesium, about 73 to 75 per cent. We are not able to give you the composition of Congreve's elixir.

74/20. Cortex.—Graph Composition.—See May 18, page 712.

75/58. A. McDougal.—You must repeat your second question, and please ob erve the rules under which this column is conducted.

75/26. J. L.—The paper is published at 22 Buckingham Street, Strand, London, W.C., price 1s.

76/49. Caffeine.—The use of bicarbonate of soda in making the Essence of Coffee may favour subsequent fermentation, and for that reason the addition of 0.5 per cent. salicylic acid to the finished product is advisable. Boric acid is not so effectual. Dissolve the 20 oz. of sugar in 18 oz. of the coffee essence by heating to the boiling point, strain, and add the rest of the essence.

77/36. Yucac.—You will find, on page 419 of vol. xxxii. (March 31, 1888), an abstract of a paper on Ipecacuanha Wine by Mr. C. A. Macpherson which gives all the information you require. According to Mr. Macpherson, the deposit formed in the wine consists of tartrate of lime, a little magnesia, fatty matter, pectic and other substances, but no emetine or other active principle (if there be such) of ipecacuanha.

78/21. Briefly stated, the way in which Bees'-wax is coloured with annatto is as follows:—Half an ounce of roll annatto is used for each pound of wax. Dissolve the annatto in a pint of water by heating, and when the liquid is boiling add the wax portion by portion, stirring well all the time. If a little water is added from time to time, the wax gradually takes up the colouring matter from the annatto, and when it has acquired the desired colour it may be removed from the water.

Information Wanted.

[Replies to the following requests are solicited by correspondents of The Chemist and Druggist.]

4/79. Seymour's formula for liquor papain c. iridin. co.

79/35. Where to obtain Egyptian eye-salve and Golding Bird's cod-liver oil.

80/57. Address of "Elworthy, maker of a silvering solution, 1s. 6d. bottles."

Personalities.

Mr. E. Ernest Jackson has succeeded to the business of Mr. Alfred Bridge as lozenge-manufacturer at Crediton.

Mr. William Fox has been appointed chemist and secretary to the Petroleum Association in place of Mr. Boverton Redwood.

Mr. S. G. Connor, son of Dr. Connor, of Newry, has taken the M.B. and C.M. degrees at the University of Edinburgh, after a distinguished career as a student.

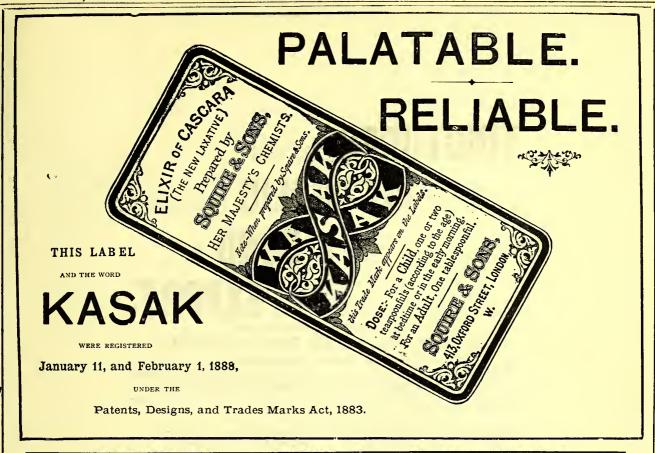
Mr. W. L. Howie, F.C.S., pharmaceutical chemist, who has for a number of years represented the firm of Barron, Harveys & Co., in the North, has been admitted into partnership with that firm since July 1. The title of the firm remains as heretofore.

The proprietors of a large number of British, American, and Australian papers are contributing towards a testimonial which is to be presented in August next to Mr. Thomas J. Barratt, the giant advertiser of Messrs. A. & F. Pears. The testimonial is to take the form of a piece of plate to the value of about 1,000 guineas, and the presentation is to be made at a banquet, over which it is expected Mr. G. A. Sala will preside.

MESSRS. JOHN WYETH & Bro., the Philadelphia drug and chemical merchants, have purchased the property at the south-east corner of Eleventh Street and Washington Avenue, Philadelphia, for \$60,000. Upon the ground stand two large buildings, one four stories high, and 86 feet by 103 feet, the other two stories high, and 50 feet by 150 feet. The purchasers intend to raise the main building 4 feet or 5 feet, and add another story to the other building, when they will occupy the entire structure.

Mr. S. M. Burroughs points out to us that in the report of his evidence in the case of Burroughs v. Wellcome, which appeared in our last week's issue, we make him state that the increase of the sales and profits of the business was greater during the year of his partner's absence than in any subsequent year. He wishes us to state that it was the rate of increase he was referring to; that year, as he stated in the witness-box, the sales and profits increased by 50 per cent. The increase had been greater in amount since, but not so large in percentage.

CARBOLIC-ACID POISONING.—Sarah Everitt, of Prince's Road, Bermondsey, aged 65, after a domestic quarrel, drank from a bottle of carbolic acid and died soon after. A poorly-clad elderly man hired a bed in a common lodging-house in Holborn on June 28, and was found in the morning unconscious with a bottle of carbolic acid by his side. He was taken to King's College Hospital, where he died soon after. A man named Outlaw, a packer by trade, committed suicide at Bolton on Sunday by taking carbolic acid.



SOLE IMPORTERS

OF

APOLLINARIS WATER,
FRIEDRICHSHALL WATER,
HUNGARIAN APERIENT WATER
(DIAMOND MARK)

THE APOLLINARIS CO., LIMITED,

19 REGENT STREET, LONDON, S.W.

SPECIAL PRICES ON APPLICATION.

TINCTURES and other ALCOHOLIC Preparations in BOND for EXPORT.

SELECTED DRUGS AND PURE CHEMICALS.

Preparations of the British and other Pharmacopæias.

Preparations of the B. P. C. Unofficial Formulary. Lozenges of the British and Throat Hospital Pharmacopæias.

Pills - Pearl-coated or Gelatinecoated.

GRANULAR EFFERVESCING CITRATE OF MAGNESIA.

EFFERVESCING SALINE.
LACTO CHEMICAL FOOD.

DRUGGISTS' SUNDRIES.

Telegraphic Address—
"ASHILL LONDON."

Monthly Price Lists on application, and special quotations for quantity.

REGISTERED TRADE MARK.



SQUIRREL BRAND.

ARTHUR S. HILL & SON

(ESTABLISHED A.D. 1755),

Wholesale and Export **Druggists** and Manufacturing Chemists,

101 & 103 SOUTHWARK STREET, LONDON.

SOLE PROPRIETORS OF

DALMAHOY'S EAU DE MENTE PECTORALE

(Or CORDIAL PEPPERMINT WATER).

The fupply of our well-known

AMMONII CARB. RESUBLIM. VOLCANIC.

being infufficient, we are introducing a new article, which is excellent in every respect, and which can safely be recommended to take the place of the above.

It is pure, and free from tar products.

Specify, when ordering,

AMMONII CARBONAS H. & S.



HOWARDS & SONS,
Stratford, Effex.

June 1, 1889.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON. BUSH LANE. CO...

and also the various Formulæ of the Special Preparations of

JAMES BASS

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.

TO CASH BUYING CHEMISTS. FIRST COME FIRST SERVED.

OCK. SPECIAL OFFERS FOR CASH WITH ORDER ONLY. SUBJECT TO BEI Orders executed in the rotation received. Cash will be returned where goods are sold out. SUBJECT TO BEING UNSOLD.

```
z. 10/3 — Zonweiss

8/8 2/ Gibson's Furniture Cream

3/6 1/6 Cleaver's Terebene Scap

3/2 1/1½ Woodward's Gripe Water

1/1 Kompo

33/1 1/6 Boxes Wright's Coal Tar Soap

9/6 2/ Atkinson's Perfumes

3/3 3/6

7/3 /6 King's Food

"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .. per doz. 4/2

.. , 2/8

.. , 5/4

.. , 3/3

.. , 9/9
                                                                                                                                                                                                                   .. per doz. 10/3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .. per doz.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /6 King's Oatmeal .. ..
/6 Bond's Ink with Stretcher
      1/12 Warner's Safe Pills
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ream . , 12/
eap . , 10/
Nater . , 8/6 | 1/12 Soden Mineral Pastilles . , 9/9
Tar Soap . , 10/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
. . , 14/
.
          /6 , Safe Yeast
/6 Diamond Dyes ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10/
   /6 Diamond Dyes
1/6 Lineham's Hair Regenerator
4/6 Barclay's Bouillon
1/6 Boxes W. & G.'s Old B. W. Soap
4/6 Vin Mariani
1/ Tetlow's Gossamer Tollet Powder
                                                                                                                                                                                                                                                                                                                           /6 King's Food
         1/11 Hall's Lnng Restorer ..
2/9 " " 2/6 2/6 " 2/6 " Campbor, English Refined, in § ounce blocks, per lb., 1/6.
Soy, E. I., per gn., 2/. Cerasin Yellow, per lb., /6; per cwt., 50/.
Bicarbonate Soda, Brunner, Mond's, 14 lbs. for /11, per cwt., 6/6.
Powdered Rhubarb, per 2-lb. bottlc, 6/6, bottle included.
Permanganate of Potash Crystals, per lb., /9½.
Bicarbonate Potash Crystals, per lb., /4.
Powdered Cassia, Best, per lb., /5; 14 lbs. for 5/6.
Loofahs, Compressed, per doz., 1/.
Castor Oil, E. I., per lb., /3, per 40-lb. tin, 9/.
                                                                                                                                                                                                                                                                                   22/6 2/6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Blaud's Pills, 4 grs., coated, per gross, /6.
Ingram's Seamless Drab Enemas, complete in cedar-wood box, per
__doz., 27/.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Higginson's Disconnecting Enema, Green, in cedar-wood box, complete, per doz., 26/6.
```

ALL FREE ON RAILS LEEDS.

W. B. MASON, Wholesale Druggist, LEEDS. London Office-CASTLE COURT, 26 HIGH HOLBORN. All Orders to be sent to Leeds.

BRITISH

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c. A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District-H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

PHARMACEUTICAL PREPARATIONS. FLUID EXTRACTS, TINCTURES & INFUSIONS, COMPRESSED DRUGS of all kinds. TABLETS, OVALS, PILULES, GRANULES, TROCHES, LOZENGES, PASTILLES, CAPSULES. MEDICINAL CIGARETTES-12 different kinds. 4 COPTHALL BUILDINGS, AGENTS: |-LONDON, E.C. Telephone No. 462. Telegrams_" FUERST LONDON.'

WYLEYS & CO.

MANUFACTURING CHEMISTS

ANI

DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,

COVENTRY.

WYLEYS' PEARL-COATED PILLS. THE DURAPLASTIC

All mixing, cutting, rounding, picking, &c., is accomplished with the aid of steam machinery, by which means we attain a uniformity in composition and size such as cannot be equalled by hand-work.

For finish, and general good appearance, they will compare most favourably with any in the market.

WYLEYS' GELATINE-COATED OVAL PILLS.

The only oval gelatine-coated pills of English manufacture in the market.

Our "Prices Current" contains an extensive list of coated pills, showing formulæ and prices, together with a number of TESTIMONIALS. Estimates for private formulæ supplied.

PODOPHYLLIN PUR.

(STANDARDIZED).

Finding great variation to exist in commercial samples, not only in regard to solubility in Rectified Spirit and Ammonia, but also in respect to the amount of the active portion of the resin (Podophyllotoxin), we have commenced the manufacture of this article. We can, therefore, supply Resina. Podophylli of guaranteed purity and standardized to a definite strength. Owing to its freedom from decomposition products and the non-employment of alum (which gives the bright yellow variety), our product is distinguished by being nearly white.

Price 2s. per oz.

THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—The Chemist and Druggist, October 27, 1888.

	1 -				
No	. 4.—Alterative Balls	•••		24/	per gros
,,	5.—Astringent Balls	•••	•••	24/	,,
,,	12.—Condition Balls	•••	•••	24/	,,
,,	6.—Cordial Balls		•••	24/	,,
,,	7.—Cough Balls	•••	•••	24/	,,
,,	16.—Cough Balls	•••	•••	27/	"
,,	17.—Cough Balls	•••	•••	27 /	"
,,	8.—Diuretic Balls	•••	•••	24/	"
,,	9.—Fever Balls	•••	•••	24/	"
,,	1.—Physic Balls	•••	•••	24/	"
,,	2.—Physic Balls	•••	•••	30/	,,
,,	3.—Physic Balls	•••	•••	36/	"
,,	18.—Physic Balls	•••	•••	42/	"
,,	19.—Physic Balls	•••	•••	48/	,,
,,	15.—Stimulating Balls	•••	•••	24/	"
,,	10.—Tonic Balls	•••	•••	24/	,,
,,	11.—Tonic Balls	•••	•••	20/	,,
,,	13.—Worm Balls	•••	•••	30/	,,
,,	14.—Worm Balls	•••	•••	60/	"

PRIVATE FORMULÆ.

WYLEYS & Co. will be glad to prepare Patent Duraplastic Balls from private recipes.

EDINBURGH

MANUFACTURERS of the Are the ONLY

To whom, at the UNIVERSAL EXHIBITION, in PARIS, 1878, the MEDAL GOLD WAS AWARDED.

NEW YORK Office-20 Cedar Street: FRAs. JAs. MACNAUGHTAN, Agent.

The new DIGESTIVE FERMENT combining the action of PEPSIN AND PANCREATINE.

SOLE AGENT FOR THE UNITED KINGDOM AND EXPORT-

KUHN, 36 St. Mary-at-Hill, LONDON.

USES.—INTERNALLY: In Dyspepsia and Gastralgia. Geo. Herschel, M.D.Lond., writes in the British Medical Journal, April 3rd, 1886:—"I find it chiefly valuable in (1) the Chronic Stomach Catarrhs of Children, (2) Acid Dyspepsia, and (3) Severe Gastric Pain coming on shortly after eating." Recent experiments made by Prof. Finkler, and published in The Lancet, July 23rd, 1887, show that Papain digests far more energetically than best Pepsin, when the solution is concentrated as it exists in the human stomach.

EXTERNALLY: It has been used by Bouchut in cutaneous carcinoma, Rossbach for dissolving the false membranes of Diphtheria (see Zeusch. für Klin. Med., vi., H. 6), by Jacobi, of New York, for the same purpose, and recently Prof. Finkler himself has restored patency to an esophagus occluded by carcinoma by the continuous administration of a solution.

PAPAIN (FINKLER).

For the convenience of dispensing PAPAÏN (FINKLER) these pills are made up in bottles of 25, 50, and 100 (one and two grains each), in convenient shapes for carrying in the pocket.

To be obtained through Messrs. F. NEWBERY & SONS, 1 King Edward St., LONDON; Messrs. JAMES WOOLLEY, SONS & CO., 69 Market St. MANCHESTER; Messrs, McMASTER, HODGSON & CO., 121 and 122 Capel St., DUBLIN; and the Wholesale Druggists in the United Kingdom.

MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. QUOTATIONS ON APPLICATION.

SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)

l part to 5 Sp. Vini Rect. 56 o.p. makes Sp. Æth. Nit. 850.

This concentrated preparation is carefully drawn in our own laboratory, is highly recommended, and is daily finding increased favour with the trade for making Sp. Nitre, as required for use, and thus avoiding the risk of a development of free acid, which is more or less prevalent in Sp. Nitre that has been drawn some time. Price in Winchester Quarts, 8s. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Otto de Rose, and all Essential Oils; Valentia Safiron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

WHOLESALE & EXPORT DRUGGISTS

MANUFACTURING CHEMISTS

IMPORTERS & DISTILLERS of ESSENTIAL OILS

PHARMACEUTICAL EXTRACTS—FLUID AND SOLID.

STANDARDIZED AND **GUARANTEED** PREPARATIONS. DRUGS AND

15 LAURENCE POUNTNEY LANE, & ARTHUR ST. WEST, LONDON, E.C.

REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON." Telephone No. 1949.



OPPENHEIMER'S

CREAM OF WALT

(REGISTERED)

WITH COD-LIVER OIL,

AND THE

HYPOPHOSPHITES OF LIME, POTASH, AND SODA

Can be obtained from all Wholesale Houses, or direct from the Sole Manufacturers,

OPPENHEIMER BROS. & CO., Manufacturing Chemists, 1 & 3 SUN STREET, FINSBURY SQUARE, LONDON, E.C.

YOUNG&POSTANS.BISMUTH,PEPSINE&STEEL

GRAN. EFFER. BISMUTH AND PEPSINE
GRAN. EFFER. BISMUTH, PEPSINE AND STRYCHNINE
GRAN. EFFER, BISMUTH, PEPSINE AND QUININE
GRAN. EFFER. BISMUTH, IRON AND QUININE
GRAN. EFFER. BISMUTH CITRATE
GRAN. EFFER. BISMUTH, IRON AND STRYCHNINE
GRAN. EFFER. CITRATE OF CAFFEINE.

GRAN. EFFER. IRON AND BISMUTH GRAN. EFFER. IRON, QUININE AND STRYCHNINE GRAN. EFFER. IRON AND ARSENIC GRAN. EFFER. IRON AND PEPSINE GRAN. EFFER. IRON AND QUININE GRAN. EFFER. IRON, QUININE AND PEPSINE GRAN. EFFER. HYDROBROMATE OF CAFFEINE.

AND ALL OTHER GRANULAR PREPARATIONS.

Now prepared only by CURTIS & COMPANY, 48 Baker Street, Portman Square, LONDON, W.

GRANULAR EFFERVESCENT ANTIPYRIN.

(Each Teaspoonful contains 8 grains.)

Introduced by Curtis & Co.

See that this preparation bears our name.

Please

MEAD'S ADHESIVE PLASTER

To supply the demand for a cheap but pliable adhesive Plaster, this article is commended as superior to all other goods of its class on the market.

 Cotton Cloth, 7 in. wide
 ...
 ...
 ...
 14/ per dozen yard rolls.

 ,, 12
 ,, 12
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...
 ...

Sole Manufacturers— [3

SEABURY & JOHNSON,

soreness, pain, or inflammation.

46 JEWIN STREET, LONDON, E.C.

NEW YORK. MONTREAL.

HAMBURG.

The Orignal

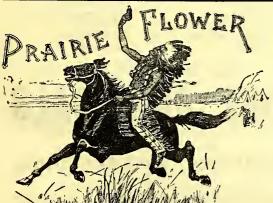
Arnicated

A.D. 1846.

see that
YOUNG'S
goods are
supplied, as there
are many worthless
imitations.

Corn and
Bunion
Plasters.

HENRY YOUNG, Manufacturer, LONDON.



SEQUAH, LIMITED, desire to call the special attention of the Trade to their Preparations—

SEQUAH'S PRAIRIE FLOWER SEQUAH'S OIL,

which have an immense sale all over Great Britain. They wish to point out the fact that all vendors of their Preparations are bound by agreement to Retail Goods at ONE SPECIFIED PRICE ONLY, thus ensuring a fair profit to the Trade, and a mutual protection to manufacturers and retailers.

SEQUAH, LIMITED, 46 FARRINGDON STREET, LONDON.

OMDOM.

SVIRE

PURE GRAIN SPIRIT 56 O.P., B.P.... 18/5 Do. DOUBLE DISTILLED 18/9

Cash with Order. Reductions for Larger Quantities than Two Gallons.

SAMPLES FREE.

STEPHEN SMITH & CO., BOW, LONDON, E.

SVA

SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through char coal, is being largely used in making high-class Perfumes.

Price, 19/-, 56 o.p.; 19/6, 60 o.p. Cash with order Reductions for Larger Quantities than Two Gallons.

STEPHEN SMITH & CO., BOW, LONDON, E.

NOTICE TO THE TRADE.

THE PRICES

OF

PATERNOSTER'S

GOUT & RHEUMATIC PILLS

And BEVINGTON'S

HOOPING COUGH DROPS

Are Advertised to the Public, from this date, at

1/- and 2/6,

instead of $1/1\frac{1}{2}$ and 2/9, as hitherto.

The Wholesale Prices of the same will be as under:—
1/- Size, 10/- per dozen.

Cash Discount on quantities of 1 gross, $2\frac{1}{2}$ per cent.

2/6 Size, 24/- per dozen.

POINGDESTRE & TRUMAN,

PROPRIETORS

71 Old Kent Road, and 187 Newington Butts, S.E.

June 20, 1889.

TARTARIC ACID

Technically Pure, in Crystals and Powder, of best quality only; also Chemically Pure;

Nienburger Weinsteinsäurefabrik

IN NIENBURG a. d. WESER.

SOLE AGENTS FOR THE UNITED KINGDOM-

OSCAR ANDREAE & CO.
26 GREAT TOWER ST., LONDON, E.C.
38

PURE

Price 1,400 fcs. per 100 kilos., or £27 15s. per cwt.

Also all other LITHIA SALTS.

Iodoform, Mercurial Salts, Osmic Acid, Liquid Chloride of Methyl, for the treatment of Rheumatism, Neuralgia, &c. Tannin, Tartar Emetic, Chloral, Terpene.

SILVER BLACK FOR JEWELLERY.

BILLAULT, 22 Rue de la Sorbonne, PARIS,

Successor to FONIAINE, PELLETIER, & ROBIQUET, Members of the Parts Institute.

PARIS UNIVERSAL EXHIBITION, Classes 45 & 51-

ESTABLISHED 1837.

H. TROMMSDORFF,

MANUFACTURING CHEMIST,

ERFURT.

SPECIALITIES:

ALKALOIDS

Aconitine,
Arbutine,
Atropine,
Cantharidine,
Chrysarobine,
Coniine,

Duboisine, Helleboreine, Hyoscyamine, Nicotine, Picrotoxine, Solanine,

Veratrine, And all other Alkaloids.

PURE CHEMICALS

For Pharmaceutical, Scientific, and Technical purposes.

SOZOIODOL PREPARATIONS.

Sole Agent for the U.K. and the Colonies,

FREDERICK BOEHM, LONDON,

27 Billiter Square Buildings.

SH

Ω

d

A

A

M

H

Z

血

占

4

"The Pills of McKesson & Robbins are quite of the highest class of merit, in respect to the method, in respect to the materials, and in respect to results."—British Medical Journal, October, 1881.

A TASTELESS TONIC LAXATIVE GRANULE.

EXACT SIZE



McK. & R. PILLS.

Sample Bottles containing 25 Pills, 7s. per doz.; Bottles containing 100 Pills, 24s. per doz.

Formula, Aloin, Strychnine, and Belladonna.—McK. & R. PILLS.

Aloin, 1-5 gr. | Strychnina, 1-60 gr. | Ext. Belladonnæ, 1-8 gr.

Dose.—One pill three times a day. Morning, noon, and night. Where a painless peristaltic action is desired by the aged or female patient, one pill may be taken every night or second night at bedtime, as directed by medical attendant.

BITTER AND NAUSEOUS DRUGS IN PALATABLE GRANULES.

				r. Rhubarb Comp. B.P 5 gr.
" " ‡ gr.	Euonymin 2 gr.	Opium, Powdered i gr.	" " " gr	. Salicylio Acid 2 gr.
1 07	and Iron	Padanhullin 1 or	in signature in the sig	Strychnine
Cannabis Indica Ext. 1 gr.	Ipecao. Powdered 1 gr.	" ½ gr.	"Control of the control of the contr	Zinc. Phosphide gr.
Cascara Sagrada Ext. 3 gr.	Mercury Bin-Iodide 1 gr. Proto-Iodide 1 gr.	,, Comp.	"E " " " g 4 g	Valerianate i gr
Cascara Dagrada Min. D gr.	,, 11000-10ulub g gi.	,, comp.	,, ,,	or of American and the Fr

In this form the ingredients are not only perfectly preserved, but do not affect the teeth, or offend the palate, and, further, can be conveniently kept out of sight by those who object to be regarded as invalids. Complete list mailed free on application.

PLEASE SPECIFY Mck. and R. PILLS.

Originated, 1870, by McKESSON & ROBBINS, New York, U.S.A.

London Agency—Messrs. S. MAW, SON & THOMPSON, 7 to 12 ALDERSGATE STREET, E.C.

Merchants, Shippers, and the Wholesale Houses in the Trade are also supplied by

Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO.,

Hospital and Private Formulas] 38 Duke Street, Manchester Square, London, W. [capsuled at Special Quotations.]

THIOL (RIEDEL).

(D. R. Patent No. 38416, Registered.) Crystals, Powder, and Liquid (40 %).

SULFONAL-RIEDEL.

Sulfonal-Riedel Tablets. Awarded a Gold Medal at the Brussels Exhibition.

PEPSIN - RIEDEL, P.B. & P.G.

Manufacturer: J. D. RIEDEL, BERLIN.

ACETIC ACID,

Chem. Pure, 30, 33 (P.B.), and up to 95 per cent., and GLACIAL.

Manufactured by the LARGEST MAKERS

VEREIN FUR CHEMISCHE INDUSTRIE

(Union of Chemical Industries).

Head Office-FRANKFORT-ON-MAIN. 9 Factories.

IODOFORMIUM BITUMINATUM

(Dr. EHRMANN).

IRON REDUCED BY HYDROGEN

IN EVERY PERCENTAGE.

The Speciality of the "CHEMISCHE FABRIK"

Dr. PAUL LOHMANN.

HAMELN, HANOVER.

GLYCERINE, CHEM. PURE,

CARBONATE OF MAGNESIA AND CALCINED MAGNESIA. Lightest and Purest.

TO BE OBTAINED THROUGH WHOLESALE DRUGGISTS. SOLE WHOLESALE AGENTS

R. W. GREEFF & CO., MINGING LONDON, E.C.

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year. The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

TOWLE'S CHLORODYNE

In CHOLERA, DIARRHEA, DYSENTERY, &c., it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the discase; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known) it should be an indispensable article in every emigrant's outfit.

THE BEST
BASIS FOR A MIXTURE FOR

DIARRHŒA SPASMS.

Refuse Cheap Imitations. LIQ. CHLORODYNI.

SHAKE, THE BOTTLE.

PREFACE AT THE Chlorolyne Manafactery. Co. M. Jurele.

MANCHESTER.

Refuse Cheap Imitations.

"Instantaneous, Warm, and Soothing."

REVISED PRICE LIST.

					Reta	il.		er d	
						d.	£	8.	d.
Towle's Chlorodyne			••	• •	1	11	0	8	6
Ditto			••	••	2	9	1	3	0
Ditto	(3 fluid oz.)		••	••	4	6		16	0
Ditto	(8 ,,)		••	• •	11	0	4	13	0
Liq. Chlorodyni (Orig	inal and onl	y Genuine`	1 1b.				1	10	0
		on .		•••			1 -		•
Ditto	ditto		₹ lb.	••				14	0
Ditto	ditto		1 lb.	• •			4	16	0
Winchester Quarts (6	lb.) 7/6 per lb	., bottles i	ree.		٠,	11	_		6
Towle's Antibilious			••	••	Ţ	11	0	8 3 5 8	0
Ditto		••	••	••	2	9	1 0	2	0
Towle's Chlorodyne	Lozenges				{0	7½ 1½	ő	0	6
Ditto	Jujubes 5			:-~	(1	T.3	١,٠	٥	U
Ditto	in bulk, bot	ties iree.	., 2/9 es	ung					
70/44-	3114-	1 lb. 10 o							
			., 10/-	**					
Ditto	ditto			biol					
N.B.— The Commission by the retailers with	thout furtho	aduta pro	t be bu	hav					
are simply wrappe	d in nanca	and not ar	noinsed i	n e			(
box, bottle, or pack		and not er	1020#04 1						
Thornton's Celebr	etad Toilat (Tream			1	0	0	9	0
Dit		J. Cull			ī		0	14	0
Dit			•••		2	6	1	4	9
Amboline (Re					2	6 6 6	1	4	0
The Thornton	(Red) Lotio	n (Stampe	d)		1 2 2 2 1 2		1	4 9	0
Thornton's Parag	on Hair Was	h	••		1	0	0	9	0
Dit	to				2	6	1	4	0
				1					

Posters, Bills, and Showcards on application.

£5 worth (assorted or otherwise) Carriage Paid.
7 lb. Lozenges and upwards stamped with Chemists'
own name, free of charge.

A. P. TOWLE & SON,

75 BACK PICCADILLY, MANCHESTER, December, 1886.



There are few, if any, Metropolitan thorough-fares possessing none interesting points to a reflective mind than Norton Folgate. The remote historic past is there found in juxta-position with the commercial bustle of the day, and the meralising student of history will there find ample food for reflection. It is recorded by Stow and other eminent antiquarian writers that the site, as depicted, was originally occupied by a monastery of the order of St. Augustine, the Postern Gate, a remnant of which is still at the corner of White Lion St. is naturally one of the curios of London. Hard by its Spitalfields, deriving its name from the Spital (Hospital) which once stood in the field there. In this ne gli-bourhood, which is so redundant in historic interest, settled the Huguentos in their flight from France, and to them we are indebted for the noted Spitalfield's Silk. Here again was erected the famous Spital Cross, where Bislop Andrews presented in 1000. There is a pieza sant story related of him while he was Bishop of Winchester, in the life of Waller the poet, wbo, going to see the king at dinner, over-heard a very extraordinary conversation be-

tween his Majesty, the Bishop of Winchester and Neale, Bishop of Durham, These two prelates standing behind the King's chair, his majesty asked them. "My lord" said he "cannot I take my subject's money when I want it without all this formality in Irathament?" The Bishop of Durham readily answered, "God forbid, sir, but you should; you are the breath of our nostrils." Whereupon the King turned and said to the Bishop of Winchester. "Well my lord, what say you." Sir, "replied the Bishop of Winchester." Well my lord, what say you." Sir, "replied the Bishop of Winchester. "Well my lord, what say you." Sir, "replied the Bishop of Winchester." Well my lord, what say you." Sir, "replied the Bishop of Winchester." Well my lord, answer me presently." "Them, Sir," said he, "I think it lawful for you to take my one when the cover of the olders it wished by Rogard you notably by Queen Mary, on her visit to the Them. Sir, "she was the cover of the standard by Rogard was as much Roman Catholic as Protestant amounted to many thousands of pounds stering per annum.] It may interest the reader to know that this Emissary continued to receive the Pence in Queen Elizabeth's reign, but failed to forward the same to the Pontif at Rome.

Through the above "King's Highway" massed the Playue carts in 1655 one.

at Rome.

Through the above 'King's Highway' passed the Plague carts in 1665, on their way to the Pits, then in the ground now called Old Street.

Donnesday Book only records two particulars in respect to London, one being ten acres of laid called Norton Folly and belonging to the Dean and Chapter of St. Pauls. Yea, ere that, the Venerable Bede, in his Ecclesiastical History of England, A D. 723, gives this at all times important neighbourhood a place.

The Print is taken from an Etching by Mr. ALFRED GEORGE ANNETT.

AN ASSORTED GROSS, £4 10



BEEDZLER & CO.



WHOLESALE AND RETAIL CHEMISTS,

18 NORTON FOLGATE, E.C.

(Opposite Worship Street, and near the Bishopsgate Low Level Station.)

AS SOLD AT YE GOLDEN KEY FOR 200 YEARS.

MIXTURE FOR THE BLOOD, 131d. and 2s. 9d.

SALUBRIOUS SALINE, AN EXCELLENT

PYRETIC FROM FRUIT SALT, 1s. and 2s.

> HOPS BITTERS, 1s. 01d. and 2s.

PAIN KILLER. 131d. and 2s. 9d.

ALL HEAVENS' SAINTS' OIL, 131d. and 2s. 9d.

> CHLORODYNE. 13½d. and 2s. 9d.

GOLDEN EYE OINTMENT, 131d. and 2s. 9d.

SOOTHING SYRUP, 13½d.

ANTIDYSPEPTIC SYRUP, 13½d. and 2s. 9d.

MALTED FOOD.

GLYCERINE CUCUMBERS, $13\frac{1}{2}d$. and 2s. 9d.

> PENNYROYAL AND STEEL PILLS, 131d. and 2s. 9d.

CASTOR-OIL PILLS, 131d. and 2s. 9d.

COMPRESSED CHLORATE POTASH TABLETS. 6d. and 1s.

> CORN PAINT, $7\frac{1}{2}d$. and $13\frac{1}{2}d$.

TANNIN THROAT GARGLE, 131d. and 2s. 9d.

CRIMSON DISINFECTING FLUID, 6d. and 1s.

PERSIAN INSECT POWDER, 6d. and 1s.

OBESITY PILLS. 1s. and 2s. 6d.

SULPHUR LOZENGES. 131d. and 2s. 9d.

ESSENCE FOR DEAFNESS, 131d. and 2s. 9d.

ETC. ETC. ETC.



Tablets Lozenges Elixir Tea

SOLE PROPRIETORS-

THE FRENCH HYGIENIC SOCIETY OF LONDON, 6 CONDUIT STREET, LONDON, W. whence will be forwarded to any applicant a Pamphlet containing the testimony of eminent British and Foreign Medical Authorities to the invaluable properties of the Coca Preparations.

"THE CHEMIST AND DRUGGIST" (of March 30, page 429) says—"The French Hygienic Society of London have for some time made a speciality of preparations of the coca leaf, such as coca-tobacco, which were calculated to be used as articles of daily consumption; and they now add to their list several which are designed to maintain the popular use of the Peruvian Invigorator. Coca tea—an excellent blend of the coca leaf and a choice Cylot tea—is likely to be a favourite, for it makes a pleasant beverage of good aroma which is powerfully restorative. Their coca clixir is a good idea. It is intended for use along with any table wine, 15 to 20 drops of it making with a glass of sherry a good coca wine, possessing the full flavour of the leaf. This flavour is a marked characteristic of all the preparations, especially the tablets and lozenges, and is an indication that care has been exercised in their manufacture. The tablets and lozenges may be used for throat troubles; and those without borax are a portable form of the restorative for use by athletes and pedestrians. All these specialities are put up in attractive style."

RETAIL PRICES.

Coca Tablets and Lozenges in boxes, 1/-, 2/6, & 4/- per Box. Coca Elixir ...

Coca Tea in tins of 1 lb. $4/-, \frac{1}{2}$ lb. $2/-, \frac{1}{4}$ lb. 1/-.

USUAL WHOLESALE DISCOUNT. CAN BE OBTAINED FROM ALL WHOLESALE HOUSES.

PETERSEN

WHOLESALE

DRUGGISTS & MANUFACTURING CHEMISTS,

Cape Town and Kimberley, CAPE OF GOOD HOPE.

ESTABLISHED 1842.

London Agents—MESSRS. BORRADAILE & CO., 150 LEADENHALL STREET, E.C.

P. J. P. & Co. can arrange with Pushing Houses to receive Goods on Commission, for Prompt Sale in this Colony and the adjoining States.



DINNEFORD'S FLUID MAGNESIA



PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild aperient for Delicate Constitutions. Ladies, Children, and Infants.

ALL WHOLESALE DRUGGIST

"CUTTING COUNTERACTED." MOONSEED BITTERS brings FULL PRICES.

Because every one who retails Moonseed Bitters has to sign an Agreement or Contract in the

following terms :-



MOONSEED ... BIT



form of Cough: Paralysis Epilepsy Con-Valsions, Cramp & Spasms. Cancers. & every other Skin & Blood disease, 6 is the safest & most certain liver



MOONSEED

Above is Facsimile of

THE WRAPPER LABEL

of the 2/9 size. It is also sold at 4/6.

MOONSEED OINTMENT

Retails at $1/1\frac{1}{2}$, 2/9, 4/6 per box.

Swindon in the County of Wilts, Proprietors of the Moonseed Bitters and Moonseed Ointment (hereinafter called the "Vendors"), of the one part of (hereinafter called "the Purchasers"), of the other part.

Ishereby it is mutually agreed between the said parties hereto as follows :-

In consideration of the Vendors selling to and supplying the Purchasers with Moonseed Bitters, Moonseed Ointment, and other preparations manufactured and sold by them (hereinafter termed "the Goods") at their usual prices, the Purchasers will observe and perform the following terms and conditions:-

- 1. The Purchasers to sell the Goods retail for full printed prices only, and for each and every Bottle or Box of Moonseed Bitters, Ointment, or Pills sold by him or them at any less price, without the written consent of the Vendors, the Purchasers shall pay to the Vendors the Sum of Twenty Shillings in the nature of a penalty, to be recoverable as ascertained liquidated damages.
- 2. The Purchasers not to supply any Wholesale House nor to sell the Goods wholesale to any Chemist or Druggist or Medicine Vendor who will not previously enter into an Agreement to retail the same at prices in accordance with the preceding Clause No. 1 of these presents.

All Purchasers who have signed a similar form of Agreement to the foregoing will be supplied upon the Vendors' usual trade terms, but those Purchasers who do not sign a similar form of Agreement to be supplied upon the following terms only, namely:—Retail, 4s. 5d. for each and every 4s. 6d. Box or Bottle, 2s. 8d. for each and every 2s. 9d. Box or Bottle, and 1s. $0\frac{1}{2}d$. for each and every 1s. $1\frac{1}{2}d$. Box or Bottle—net in all cases. Wholesale, 4s. 4d. for each and every 4s. 6d. Box and Bottle, 2s. 7d. for each and every 2s. 9d. Box or Bottle, and $11\frac{1}{2}d$. for each and every 1s. $1\frac{1}{2}d$. Box or Bottle—net in all cases. This Agreement and the terms and conditions herein contained to remain in full force and virtue for the term of 7 years from the first day of March, 1889.

As witness the hands of the said parties hereto the day and year first above written.

We call attention to the important steps which we have taken to prevent our specialities being retailed at less than the advertised prices, and we ask the co-operation of the Trade in maintaining the integrity of the scheme whereby the sale of our preparations may always be retained by the legitimate trade. We will not only endeavour, by all means in our power, to prevent the advertised prices being "Cut," but will give Chemists every assistance and facility for making this a large as well as a paying business.

Please write for Terms and Form of Agreement. NOTE that we allow retailers of Moonseed Bitters 2s. 6d. per thousand for the Distribution of Pamphlets.

A. E. POWELL & CO., SWINDON.



The Chemist and Druggist says:—Mr. Arthur W. Shirley has produced a very attractive biscuit china figure, represented in the annexed engraving. The advertisement is effective without being at all vulgar, and the little crier, we expect, will soon be a familiar figure about the country.

OYEZ! OYEZ!! OYEZ!!!

THIS ELEGANT BISCUIT-CHINA FIGURE, AN ORNAMENT TO ANY SHOP,

GIVEN AWAY

To Purchasers of 25/ worth of

SHIRLEY'S A1 BRAND MENTHOL

OR TWO IF 40/ ORDER IS PLACED.

The following special parcels have been arranged to suit all classes of trade:-

PARCEL 1. 25/. 4 doz. 2d. 1 doz. 3d. 2 doz. 3½d. 3 doz. 4d. 2 doz. 6d.	PARCEL 2. 25/. 4 doz. 6d. 2 doz. 4d. 1 doz. 1s.	PARCEL 3. 25/. 3 doz. 3d. 2 doz. 1s. 1 doz. 4d.	PARCEL 4. 25/. 1 doz. 9d. 2½ doz. 1s. ½ doz. 1s. 6d.
PARCEL 5. 40/. 4 doz. 2d. 2 doz. 3d. 3 doz. 3½d. 5 doz. 4d. 4 doz. 6d.	PARCEL 6. 40/. 5 doz. 6d. 3 doz. 4d. 2½ doz. 1s.	PARCEL 7. 40/. 4 doz. 6d. 4 doz. 4d. 1 doz. 9d. 2 doz. 1s.	PARCEL 8. 40/. 4 doz. 1s. 2 doz. 9d. ½ doz. 1s. 6d.

By calculating what each of the parcels would realise when sold, it will be found that they yield an average profit of 80 per cent. to the retailer on his outlay.

Numerous letters have been received already, testifying to the satisfaction given by this little figure. One firm writes—"We have just received the figure, and must indeed say we are highly pleased with it, and have it in a prominent place on our counter." Another writes—"It is quite the centre of attraction of my establishment." Another—"Figures sold a dozen cones first day of showing them."

fd.

A1 COCAINE & MENTHOL TOOTHACHE TUBE.

12 ON A CARD. 3/6 DOZ.

Sells really well.

A1 CORN & WART TUBE, 6d.

12 ON A CARD. 2/3 DOZ. JUST IN TIME FOR THE SEASON.

ARTHUR W. SHIRLEY, 30 PATERNOSTER SQUARE, LONDON, E.C.

And 11 & 12 ROSE STREET, NEWGATE STREET, E.C.

JOHN SANGER & SONS'

ILLUSTRATED PRICE CURRENT

Will be sent post free upon receipt of business card. It has been carefully revised to date, and contains a most varied and complete list of all kinds of PROPRIETARY MEDICINES,



DRUGGISTS' SUNDRIES, LOZENGES, MINERAL WATERS, and TOILET REQUI-SITES. In comparing with other lists, do not forget the discounts, viz, 10 per cent. and 5 per cent. one month.

SAMPLE ORDERS FOR SMELLING BOTTLES, SPONGE BAGS, BATHING CAPS, SPONGES, AND OTHER SEASONABLE ARTICLES CONFIDENTLY SOLICITED.

Register kept for the convenience of Customers requiring Assistants & Assistants wanting Situations.

JOHN SANGER & SONS,

489 OXFORD STREET, LONDON, W.

S. MAW, SON & THOMPSON'S

BATH GLOVES, RUBBERS, &c.

	Glov	ves. Straps.	Pads.	Gloves, Straps. Pads.
	CALEFACIO OR BADEN, No. 1, (Pai	irs.)		HONEYCOMB, White. per doz. 5/4 9/0 5/4
	soft Brown per doz. 5/4 & 6/	0 9/0	5/4	MONIMICOND, WARREN PLANE OF STEEL OF
	CALEFACIO OR BADEN, No. 2,			REVERSIBLE, No. 1, one side
	hard Brown per doz. 6/	010	F 1.4	soft Brown, the other best
I		0 9/0	5/4	White Turkish . per doz. 6/8 11/0 5/4
	CALEFACIO OR BADEN, No. 3,	-		White Intent . per doz. 0/0 11/0 5/4
	soft Brown, assorted patterns,			REVERSIBLE, No. 2, one side
	per doz. 6/	6 9/0	5/4	hard Brown, the other White
1	CALEFACIO OR BADEN, as-			
	sorted patterns, export quality,			Honeycomb per doz. 6/8 11/0 5/4
ı		0 (7) 7	7 7 7 7	REVERSIBLE, No. 3, one side
I	per doz. 4/	U (Rea	labels)	
I	CALEFACIO (the U.S.), Striped			Egyptian Loofah, the other best
I	soft Brown per doz. 6/	6 9/0	5/4	White Turkish, per doz., single 4/0 13/0 -
I	TURKISH THIN WHITE GI	LOVES.	er doz.	pairs, 2/9 & 3/- PADS, per doz., 3/6
I	Ditto BEST QUALITY		,,	4/9 & 6/- ,, ,, 5/-
ı	FLANNEL	•		6/8
١		• •••	,,	, , , , , , , , , , , , , , , , , , ,

S. MAW, SON & THOMPSON, LONDON.

S. MAW, SON & THOMPSON'S

SUPERIOR QUALITY

WATERPROOF CHECK SPONGE BAGS.

No. 1	2	3	4	5	6
7×6	8×7	9×8	10×9	11×10	12×11 inches.
6/0	7/0	9/0	11/0	12/6	16/0 per dozen.

For other descriptions see Quarterly Price Current, page 84.

S. MAW, SON & THOMPSON'S BRIGHTON SPONGE BAGS,

WITH BALL CLASP FASTENINGS, NICKEL-PLATED.

	No.	2	3	4	5	6
		8×7	9×8	10×9	11×10	12×11 inches.
OHECK	•••	16/0	18/0	20/0	26/0	28/0 per dozen.
PAISLEY	•••	18/0	20/0	22/0	28/0	32/0 "

7 to 12 ALDERSGATE STREET, LONDON.



THE BRIGHTON SPONGE BAG.

I. W. PARMENTER & CO., LIMITED,

MACHINE-MADE PATENT FOLDING PAPER BOXES.

Largest Capacity in Great Britain.



Quantities of 5,000 Boxes and Estimates Upwards Furnished

Now being extensively used for Drugs, Patent Medicines, Confectionaries, Portable Jellies, Seeds, Dried Herbs, Prepared Foods, &c.

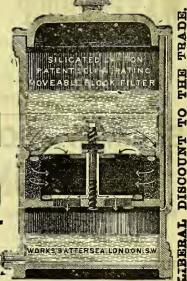
> GARDEN LONDON HATTON KIRBY



Glass Table Filters.

By means of which the water is Aerated and Filtered simultaneously, rendering it, even after boiling, Pure, Bright, and Palatable.

The Silicated Carbon Block can be Instantly Removed, leaving the whole of the Filter Open for Inspection and Cleansing.

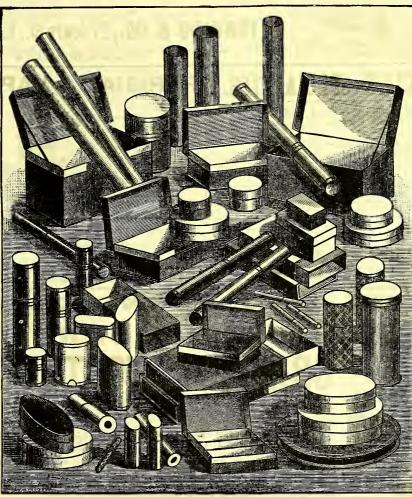


Domestic Filters.

PRICES WRITE TO THE AND PARTICULARS,

TER CO., BATTERSEA, LONDON, S.W. 46

Baking Powder. Bottles. Camphor. Capsules. Cotton Wool. Disinfectants. Confectionery Essential oils, Perfumery. Fancy Soaps. Menthol. Magnesia. Marking loks. Patent Medicines. Surgical Instruments. Seidlitz Powders.



Sponges. Feeding Bottles. Starch. Tobacco. Cigarettes. Postal Purposes. Coffee. Syringes. Rooth Stopping. Hair Preps. Cosmetiques. Photographs. Cement. Lozenges. Horse Powders. For And was

TABLISHED OVER HALF A CENTURY. Sond for astimutes and

Austin & Co.

FANCY CARD & OTHER BOXES, ROUND, OVAL, OR SQUARE.

Office and 8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works-BROAD YARD, TURNMILL STREET.

ENTAL

AROMATIC

FOR BATH AND TOILET PURPOSES,



The ORIENTAL AROMATIC SALTS, when dissolved, render the water very soft, and impart a most agreeable and refreshing perfume that can be

diffused with advantage in a room where the air is close and depressing.

The ORIENTAL AROMATIC SALTS strengthen the tissues, perfume and invigorate the body, preserving it from contagious diseases, and cleanse the pores, thus facilitating the cutaneous transpiration so necessary to life.

The ORIENTAL AROMATIC SALTS are unrivalled for beautifying and

preserving the Skin, rendering it soft and velvet-like; and for keeping the complexion perfectly bright and clear.

They are indispensable in the Bath as well as in the Bedroom, and should be used by everybody. In most cases of Skin Diseases these Salts will be found

invaluable.

Sold in Bottles at 1/8. Wholesale of the Patentees and Manufacturers-

CO., 27 Jewry St., E.C., LONDON.

To be had also of Messrs BREIDENBACH & CO., Perfumers to the Queen, 187b NEW BOND STREET, W

BRECKNELL'S SPECIA

BRECKNELL'S SKIN-SOAP.—Prize Medal.

Recommended by Eminent Medical Men, and is the best for producing a clear and healthy skin.

BRECKNELL'S SADDLE SOAP.—Prize Medal.

Highest Testimonials as to its Superiority. The best article in use for the purpose.

BRECKNELL'S HARNESS COMPOSITION.

Strongly approved and recommended. Gives Black Harness a good appearance, and preserves the Leather.

BRECKNELL'S SOAP-CREAM PASTE.

An excellent and agreeable article for cleaning and improving the appearance of Brown Leather Boots. Made specially for the purpose.

BRECKNELL, TURNER & SONS.

(TO HER MAJESTY, &c.,)

31 HAYMARKET, LONDON, ENGLAND.

VAPORISER PARISIAN



FOR THE COMPLEXION. FOR ALL: THROAT

Highly recommended by JAMES STARTIN, Senior Surgeon to the London Skin Hospital. See The Lancet, May 11, 1889. Retail price, 12/6. Advantageous terms to the trade. Regd. 108,738 EAU DE LIS, preparation for the complexion. Retail price 2/.

Sole Wholesale House-

PARISIAN VAPORISER, 202 REGENT ST., W.

VV = 11 11 = AND SOUND TEST TET

JEWSBURY &



This eld-established and increasingly favourite Dentifrice has been ever Sixty Years before the Public, It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

JEWSBURY & BROWN, Chemists, MANCHESTER,

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered, sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

PATRONISED \mathbf{BY} HER MAJESTY.

BARBER'S



WHICH IS CHANGED BY HEAT TO A JET BLACK, Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles.

Also Barber's Concentrated Liquid COCHINEAL, for Colouring Jellies, Custards, &c. Put up in 6d. and 1s. Bottles.

Also Barber's Artificial Ivory for Filling Decayed Teeth, 1/- per packet. MANUFACTURED ONLY BY THE PROPRIETORS-

BARBER & CO., Club Moor, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO.

Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMPTHORNE, PROSSER & CO., Dunedin and
Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER
& CO., Club Moor, Liverpool, England.

LOVELY BATH and TOILET WATER

Obtained by using PASTA MACK.

GOLD MEDAL, Hygienic Exhibition, Ostend, 1888.



This entirely new and Unrivalled Healthgiving preparation SOFTENS the WATER instantly imparts A MOST DELICIOUS ODOUR, and

Beautifies the Complexion in an extraordinary way.

See the Trade Mark on every box.

en says:—"Pasta Mack is made in small tablets, which are pleasantly when placed in water soon dissolve, and impart a violet-like perfume and the atmosphere." facturer and Inventor, H. MACK, Ulma(D. Export from all whole-Wholesale Agents, OSBORNE, GARRETT & CO., London, W.



The Reservoir attached to the Brush is simply and quickly filled with water or any other liquid. Additional Brushes if required.

Plain White, 13/6 per dozen; Coloured Bnamelled Reservoir, superior Brush, 17/ per dozen, in fancy boxes.



Silver Plated-Tea size, 3,9; Dessert, 7/6; Table, 11/ per dozen, on cards.

GOAD & COMPY 42 Moorfields, Moorgate St., London.

IMMENSE SALE.

SOLD EVERYWHERE.

As used and recommended by Madame Marie Roze, the Prima Donna.

PRICE, 6d. and 1s. per Pot.

CAUTION.-SEE "WOODS, PLYMOUTH," ON EACH POT.

PURE OTTO OF ROSE,

SHIPKOFF & CO.

DISTILLERS AND EXPORTERS.

BULGARIA. KIZANLIK,

Agent for Great Britain-G. P. BAKER, 19 Ivy Lane, LONDON, E.C.

THE OTTO OF ROSE which this house distils and exports is known above all by the absolute purity of its quality and the unexcelled sweetness and strength of its odour. It is guaranteed to be the finest essence produced in the famous Rose Valley of Bulgaria.



68 SHAFTESBURY ST., NEW NORTH ROAD, LONDON, N.

MANUFACTURERS (WHOLESALE ONLY) OF

FLESH **GLOVES**

CORN & BUNION PLASTERS & CHEST PROTECTORS.

LISTS AND SAMPLES ON APPLICATION:



THE

ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH, 12 PALL MALL EAST, LONDON, S.W. SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

SULE ABLENTS FUR UR. WARLUMUNI'S UALE VAUUINE.

Tubes, 2e, each: Half Tubes, is, each. Pomade in vala, is,

HUMAN VACCINE, from healthy children only, microscopically examined and
source quoted. Tubes, two-thirds fail, is, is, each; Tubeson-third full and Lancetcharged Points, is, each; Pin-points, is, 1d, each. Eighteen charged Small Points,
is, Tubes, two-thirds full (same as those mentioned above, but without source), in
quantities for export, 45 per 100 Tubes. Pin-points nucharged, is, per dozen,
vaccine Ejectors is, 3d, each, inclinding postage. Vaccinations by appointment,
P.O.O.'s (including postage, and crossed London and Wes'minster Bank), with
erders, payable to

Office hours, 18 to 4. Saturdays 10 to 2.

DR. RENNER'S ESTABLISHMENT FOR VACCINATION WITH CALF LYMPH.

186 (late 228) Marylebone Road, London, N.W.

VACCINATION FROM THE CALF DAILY FROM 11 TO 12 O'CLOCK.

Reduced price of Calf Lymph (daily fresh)

	Ivouuoou	· prioc	or our	بسريد	P- (cuity .		٠,٠		
Thomas	{ Large Small	***		•••	28.	each,	or 3	for	58.	64
Points -	Large Small	•••	•	***		11			28.	
	•					, ,,			28.	
Squares	114	_	***		28.	6d. ea	ich.			

Registered Telegraphic Address-" VACCINE LONDON."

Sent on receipt of remittance addressed to the Manager of the Establishment. Discount to the Trade.

LIME JUICE CORDIAL

A Pure Non-Alcoholic

Refreshing Beverage, made from the finest quality Lime Juice.

Quart Size (1 doz. contains 2 galls.) - - 7/6 doz, Net Cash. 6 doz., with Buyer's own name - - - 7/-99

IRON TONIC.

PERMANENT & BRIGHT.

8-oz. Bottles - 6/6 doz. 16-0z. ,, - 12/- ,, PLAIN LABELS.

If 6 doz. be ordered, Buyers may have their own name on at 6d. doz. reduction.

TERMS-Cash with order on new accounts.

OUININE AND EFFERVESCING CITRATE OF MAGNESIA.

Good quality, in pale green round Bottles; Labels without name; sealed Corks.

GRAPE JUICE SALINE.

A Refreshing, carefully prepared Saline.

In 8-oz. Stoppered Cheltenhams, 8/- dozen.

6 dozen with Buyer's own name.

Bulk, 7 lbs., 1/ per lb. Package free.

Carefully Prepared by

HOCKIN, WILSON

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD,

LONDON, W.

S. MAW, SON & THOMPSON'S FEEDING BOTTLES.



THE ALEXANDRA.
(Barthenware Cap.)



THE EXPORT.
(Glass Screw Stopper.)

	Whit	e Fitti	ngs.	Black	k Fitti	ngs.
Alexandra, China or Wood Top Corks per doz.	3/8	_		4/3	_	_
Alexandra, 2nd Quality, Wood Top Corks ,,	3/-		_	3/3	_	
Alexandra, Earthenware Caps,	_	8/-	11/-	_	8/6	12/-
Alexandra, Earthenware Screw Stoppers ,,	_	_	11/-	_	-	12/-
Alexandra, Glass Screw Stoppers,	4/-	8/-	11/-	4/6	8/6	12/-
Export, China or Wood Top Corks,	3/6		_	4/-	_	
Export, 2nd Quality, Wood Top Corks ,,	2/9	_	_	3/3		-
Export, Earthenware Caps,	_	7/3	_	_	8/-	_
Export, Glass Screw Stoppers,	4/-	7/6	_	4/6	8/-	

FOR FURTHER PARTICULARS SEE QUARTERLY PRICE CURRENT, PAGES 65 AND 66.

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

S. MAW, SON & THOMPSON, LONDON.

B. NOAKES

142 SPA ROAD & DOCKLEY ROAD, BERMONDSEY, LONDON, S.E.

METALLIC CASK MANUFACTURERS & TIN-PLATE WORKERS.

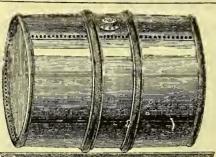
Capacity 40 to 120 Gallons,

AS PER ILLUSTRATION.

IRON KEGS, IRON DRUMS,

All kinds of Chemicals, Varnishes, Paint, Spirit, &c.

Telegraphic Address_"NOAKES LONDON."



These large Steel Casks, similar to sketch, can These large Steel Casks, similar to sketch, can be handled with equal facility to wooden barrels, and, owing to their strength and durability, can be used over and over again for an indefinite period. They are perfectly liquid tight, being tested at a very high air pressure, and, unlike wood, do not absorb any of the contents. They are all fitted with interchangeable screw bungs, and can also be fitted with screw plug in head, for draw-off tap.

and can also be fitted with screw plug in head, for draw-off tap.

They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glyccrine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Steel," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

AIR-TIGHT TIN. NOAKES' PATENT.



Opens without a Knife

"No better tins can be found."—European Mail, 9th May, 1889.

Eminently suitable for packing
MIXED
PAINTS, SYRUPS RUITS, CREAM, ONEY,



Patent Rings, Lids, and Bottoms, supplied loose for Export, or to Firms making their own Tins.

Levering open with a Coin. NOAKES' PATENT.



Closes without Solder.

"A Tin which can safely be recommended to the attention of packers."—The Grocer, 30th July, 1887.

THE NEATEST TIN.

THE MOST AIR-TIGHT TIN.

NO SHARP EDGES.

NO CUT FINGERS.

"Possesses important advantages over others of a somewhat similar kind."—British Trade Journal, 1st July, 1887.

NO SOLDER USED.

NO KNIFE REQUIRED.

EASILY OPENED.

EASILY CLOSED.

OTHER DESCRIPTION OF BOX FOR

Such as Decorated Tin Lozenge & Tooth Powder Boxes, Round, Square, or Oblong, &c.

In the High Court of Justice, Chancery Division.

GRIFFIN v. NOAKES, 1887.

PATENT SELF-FIXING LEVER TINS.—This action has now been decided our favour.

WRITE FOR PRICE LIST No. 6.

B. NOAKES & CO., BERMONDSEY, LONDON, S.E.

Supplied of the best quality in wholesale quantities by VEY & CO., Distillance JAMES CO.

& W. HARVEY & CO., Distillers, Yoker, GLASGOW. JAMES CHAMBERS & CO., 23 BIRCHIN LANE, CORNHILL, E.C.

56 o.p. 18/9; 60 o.p. 19/3 per gallon. SPECIAL QUOTATIONS FOR QUANTITY, AND FOR EXPORT IN BOND.

o.p., 18/9 per gall.; 56 o.p., 18/3 per gall. WITH CASH ORDER.

ST. ANDREW'S DISTILLERY, CLERKENWELL ROAD,

RBOMC POWDER(PINK) in 1 Cwt. 2 Cwt. CASKS 11b & 2 Packages POWDER (PINK, in TINS 64 & 1/-FLUIDin 6d 1/ &1/6 STOPPERED BOTTLES. CARBOLIC & CLYCERINE SOAP

MACHINES.

"These machines have for many years proved most serviceable on a large and small scale for Grinding, Levigating, and Mixing Powders, Pill Masses, Paints, &c." Amongst the articles which are readily ground by it may be mentioned Ginger, Seeds, Salts of all kinds, Cream of Tartar, Sugar, Cocoa, Pepper, Spice, Jalap, Rhubarb, Gums, Aloes, Barks, &c.; and for mixing or kneading Lozenges, Pill Masses, Glaziers' Putty, Bread, Biscuits, &c. ILLUSTRATED PRICE LIST, with full particulars, sent free. Prices from £8 10s. to £60.

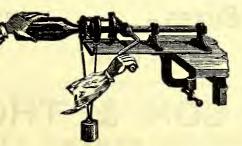
Dumeld, near DERBY

London Office and Show Rooms:

6 ELDON ST., LONDON, Agent-Z. CARTWRIGHT.



The only Machine which leaves no crease or pleat on the Capsule.



Can be fixed to any Counter. A single pull of the lever is sufficient to fix the Capsule.

Patentee-C. MELIN, 37 Crutched Friars, LONDON, E.C.

CARBOLIC POWDER, £4 TON.

CARBOLIC PINK POWDER, 5/-, 7/6, and 10/- per cwt., in bags or easks. WHITE CARBOLIC POWDER, 10 %, 15 %, and 20 %, equally cheap.

HANDSOME LARGE DECORATED BLACK AND GOLD TIN BOXES.

Holding 1½ lb. (usual 1/- size), 4/6 doz. Ditto, LARGE SIZE (usual 1/6 size), holding about double quantity, 6/- doz.

PALE CARBOLIC ACID, 99 per cent. (No. 5), and CHLORIDE OF LIME below market prices CRUDE CARBOLIC ACID (Brown), 1/-, and 1/6 Gallon; also in patent stoppered bottles, labelled.

SANITARY FLUID or CREOSOL (to be used with 100 parts of water, making a milky fluid), half usual prices.

All goods delivered free in London or suburbs, or to rail or docks. THE CHEAPEST HOUSE IN THE TRADE.

HAMILTON & CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

JEYES' DISINFECTANTS.

THE ONLY COMPOUNDS SANCTIONED BY H.M. BOARD OF TRADE.

FLUID, POWDER, AND SOAP.

PERFECT PURIFIER," in 6d. and 1s. bottles, and in bulk at 5s. per gallon. SANITARY POWDER, in 6d. and 1s. tins, and in bulk. HOUSEHOLD AND DISINFECTANT SOAP, from 4d. per lb. TOILET SOAP, in fancy boxes, from 1s. each. DOG AND POULTRY SOAP.

"JEYES' FLUID" is the most powerful germicide and antiseptic known, and Non-poisonous. (See Lancet, January 5, 1889.)

LIQUOR ANTISEPTICUS (JEYES'),

A Refined Preparation of Jeyes' Disinfectant Fluid, for Medical and Surgical use, and a perfect non-poisonous substitute for Carbolic Acid, Iodoform and Corrosive Sublimate. In 4-oz. and 12-oz. bottles, at 1s. 1½d. and 2s. 9d., or in bulk at 10s. per gallon.

JEYES' 10 % SURGICAL SOAP,

The best Antiseptic and Disinfectant Soap for Use by Surgeons after operations, &c. In Metal Boxes at 1s.

Of all Chemists and Drnggists. Wholesale Terms and all particulars on application to

JEYES' SANITARY COMPOUNDS COMPANY, LIMITED, 43 CANNON STREET, LONDON, E.C.

PAPIER-MOURE.

Per 100, 2/. Per 1,000, 19/.

INSECTIGIDE VICAT.

In Bottles - - per doz. 3/4 & 6/9
In Bellows Boxes - - per doz. 3/4
In ditto (Tin) ,, 69

S. MAW, SON & THOMPSON,

ALDERSGATE STREET, LONDON.

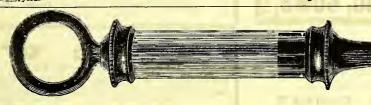
THOMPSON, WALTERS, HOLE & GO., LD.



Druggists' Sundries

SURGICAL INSTRUMENTS,
PERFUMERY, ETC.





IMPROVED SYRINGE FOR THE INJECTION OF GLYCERINE.

YULCANITE, with Glass Barrel, 14/- per dozen, less 5 per cent. monthly account.

SELTZOGENES

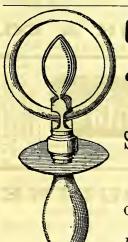
On FEVRE'S system.

 3-pint.
 5-pint.
 8 pint.

 CANED ...
 ...
 each 8/ ...
 12/5 ...
 20/9

 WIRED ...
 ...
 , 7/9 ...
 11/9 ...
 18/11

WIRED ... ,, 7/9 ... 11/9 ... 18/11
Less 5 per cent. discount for monthly account. SPECIAL QUOTATIONS FOR QUANTITY.



GREAT NOVELTY

THE

"ECLIPSE"

(REGISTERED

COMPINED

Soothing & Teething Teat

REVOLVING RING.

ON CARDS OF 1 DOZEN.

Per Dozen, 3/6

Less 5 per cent. discount for monthly

THOMPSON, WALTERS, HOLE & CO.'S

In great variety of patterns and colours.

grown rangers on particular many contracts	
BRIGHTON, White Honey Comb, stoutper doz.	5/6
,, ,, thin,	4/6
Brown "CALEFACIO, coarse or fine "	5/6 5/6
., fancy stripe border,	2/3
DEAUVILLE, brown and white, striped	4/3
brown, striped " DIEPPE, granite colour "	4/3 5/6
LOOFAHS AND TURKISH GLOVES, single gloves ,,	3/6
SCARBOROUGH, ôice pattern, brown and white	5/6 3/9
SULTAN, white with red stripes,	6/0
TURKISH, thin, white, No. 1,	3/0
,, ., ,, No. 2, ,, thick,	2/0 4/9
, striped,	3/8
UNION, one side hard brown, the other soft white	6/3
VICTORIA, brown, with red and white stripes " Subject to 5 revent discount for monthly account. Special discounts for any	6/3

Illustrated Catalogue for 1889 now ready. Post free on application.

THOMPSON, WALTERS, HOLE & CO., LD.

CURTAIN ROAD, LONDON, E.C.

HORN & SON.

OFFICES FOR BRITISH AND FOREIGN

PATENTS AND TRADE MARKS.

SOMERSET CHAMBERS, 151 STRAND, LONDÓN (NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration gratis.

THE MANCHESTER MAKERS OF

Established 1840.

AND FINISH.

. & D. MACNAIR & CO., 39 Robert St., Bridgeton, MANOHESTER, GLASGOW. Send for prices and samples.

IMPORTERS OF SHELLAC, GUMS,

J. BROTHERS & CO.

MANUFACTURING OHRMISTS.

AND WHOLESALE AND RETAIL DRUGGISTS,

KALBADEVIE ROAD. BOMBAY.

Agencies and Consignments of Goods solicited.

Dunn's

(Healthful, Useful.)

Certificate of Certificate of Analysis on each tin. Fruit-Salt

Manufactured by W. G. DUNN & CO.

Baking Powder

21 Mincing Lane, E.C. "THE COOK'S BEST FRIEND."

Works-Croydon, Surrey.

Price List and Sample on application.

TRADE MARK

THE

LIVERPOOL PATENT LINT CO.

MARK STREET MILLS. NETHERFIELD ROAD NORTH,

> LIVERPOOL. See Advertisement.

CHLORIDE OF GO

19/- per dozen 15-grain Tubes (guaranteed); Postage, 2d.

The best in the market. Immense quantities sold. Exported to all parts of the World.

LOUIS ROWLAND (Refiner), 59 South John St., LIVERPOOL.

SHEEP

DIPS

OUIBELL'S

AND

DISINFECTANTS.

MANUFACTORY :- NEWARK-ON-TRENT.

Jn. GIRAUD FILS FINE PERFUMERY AND TOILET SOAPS,

GRASSE, FRANCE.

FIRST PRIZES AWARDED AT EVERY EXHIBITION. Large Gold Medal at Nizza, 1984. First Order of Merit, with Special Mention, at the Melbourne International Exhibition, 1888-1889.

SPECIALITY. _ Essencee, Toilet Waters, Extraits and Soaps à la Violette de Nice et de Grasse.

SPT. VINI RECT. 18/9 gall., 56 o.p. { Cash with order. **SPT. VINI METH.** 61 op., 2/2 gall., 30 gall. cks. 2/4 , 12 , tins

ABSOLUTE ALCOHOL ('795), 3/ per lb. (2 galls. & up.)

VIN. AURANTII 4/- and 4/6 per gall.

VIN. XERICUM 6/6 and 7/6 Dutton St. Distillery, MANCHESTER. A. MACNAIR & CO.

THE ALOFAS REMEDIES

TINCTURES, PILLS, CINTMENTS, EMBROCATION, ETC.

AGENTS WANTED (will be Advertised in Local Papers). Write for Pamphlet

THE ALOFAS COMPANY, Central Depot, 20 New Oxford Street, LONDON, W.C.

Orange

(VIN. AURANT., P.B.)

Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export, as it will keep good in my climate. In casks, 13, 27, 58, 119, 140 gallons; small casks 3s, 3d, per gall, carriage allowed. In wine bottles (not less than 3 dos.), at 9s. per doz., including bottles. Cases extra and returnable. Sample six stamps. Special quotations to large buyers.

GEO. DURRANT & CO., Hertford.

DEAD FOUND

BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm buildings by it."—C. Wilson Offord.

"It is the most certain remedy I have ever tried. Little pellets about, the size of a pea are put in the rat holes or in their runs. I destroyed over 300 rats from one dressing with it."—C. Cook. Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6dd, 1e., 2s., and 3s., of Chemists.

SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 2s years. In packets 3dd., 8dd., 1e., and 2e. each, with directions for nse, of SANFORD & SON, Sandy, Beds, Liberal terms to Chemists. Wholesels of Barolay & Son, Sanger & Son, Kewbery & Sone, Edwards, and others, London (England).

HAND-PICKED GUM ARABIC

Wholesale and Export Druggists before buying elsewhere should apply to

FREDK. FINK & CO.

10 & 11 MINCING LANE, LONDON, E.C.

ritchevs

Frepared only by
T. CRITCHLEY,
BLACKBUEN, and
1 & 9 Australian Avenue,
LONDON, B.O.

LAVANDULINE

THE NEW SMELLING SALTS (REGISTERED).

REFRESHING, AGREEABLE, & INVIGORATING.

SOLD IN BOTTLES AT 1/- AND 2/- EACH.
PREPARED ONLY BY

Perks & Llewellyn, Lavender Farmers, High St., Hitchin.

A LARGE DEMAND IS BEING CREATED FOR

"
DEVONSHIRE CREAM" OINTMENT
Male from Pure Cream.
Chemists, &c., please write for Framed Showcard and Counter Bills, gratis,
Pots. 1/1s; Wholesale, 9/6 per doz.; Cash discount, 75 per cent.
Carriage Paid on boxes condaining 3 dozen and upwards. Agents required everywhere, Special terms.

CHAS. FORTESCUE & CO., SOLE PROPRIETORS, PLYMOUTH, DEVON.

Sole Wholesale Agents for London—

ROGERS, EAMES & CO., 16 BOROUGH HIGH STREET. S.E.

The Only Award, Edinburgh Exhibition, 1886.

FLEXIBLE

Send for Samples and

Send for

JULY 6, 1889.

GELATINE

Price List.

Samples and Price List.

CAPSULES

IN BULK.

JAS. ROBERTSON & CO., 35 George St., EDINBURGH.

FIRST-CLASS

MEDICATED & TOILET SOAPS

P. GELSTON & CO.

Manufacturing Chemists, 31 China Lane, Manchester

These Soaps sell readily, and give great satisfaction. Prices and Samples on application.

PREPARED SUET of the Finest Quality, for Pomades, Cold Cream, &c., 8d. per lb.; 14 lbs., 7d.

BURROUGH.

CALE ST., CHELSEA, S.W.

and Methylated Spirit.

WRITE FOR PRICES.

THE ONLY

WATERPROOF

INVENTORS AND ONDON MANUFACTURERS

THE N. C. Cos. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

ALL WHOLESALE DRUGGISTS &c. KEPT IN STOCK BY



OF OTHER SE

CO. 20 RED LION SQUARE, LONDON, W.G.

WHOLESALE BRUSH & COMB MANUFACTURERS

ILLUSTRATED LIST OF FANCY BRUSHES

(100 pages) JUST PUBLISHED, AND CAN BE HAD ON APPLICATION. Telegraphic Address_" DUKAS LONDON." Telephone No. 2727

WILSON'S PATENT

Are bound to take the lead, as they afford such satisfaction and delight to consumers, being immediately covered with a dense mass of flies when opened out. Dealers, too, discover to their amazement that they require no pushing whatever—simply letting go, when, like a meuntain stream, the trade goes briskly on, gathering volume on its way. TEN of these papers are used in the time that ONE of the old sort was lying about, and TEN times the number of people use them, as the flies spare nobody, and Groers, Confectioners, Butchers, Bakers, Milk Dealers, and Greengrocers, who suffer most, dare not have dead poisoned flies lying over their stock. The papers are as clean to handle as a sheet of note-paper, and are packed in a thoroughly respectable manner, making them fit to be sold in the best establishments.

There is no price marked npon them, but the proprietor considers that a halfpenny is a good charge to make, as the consumption is so very free.

4/6 per gross; 10 gross, 4/-; 25 gross, 3/6; 2½ per cent. or cash with order, and please note that no lower rate per gross will be charged for any larger quantities. No orders from New Customers will be executed unless accompanied by cash.

WHOLESALE LONDON DEPOT-

Mr. H. C. QUELCH, St. Paul's Chambers, Ludgate Hill.

PROVINCIAL WHOLESALE DEALERS-

BIRMINGHAM-Wood & Co., Chemists, Holloway Head; and

C. Cadby, The Parade.
GLASGOW—The Apothecaries Company. LIVERPOOL-Evans & Co., Ayrton & Saunders, John Thompson. EDINBURGH-Raimes, Clark & Co.

YORK-Raimes & Co. MANCHESTER - Oldfield, Pattinson & Co.

LEEDS-Goodall, Backhouse & Co. | CARDIFF-Albert Hagon.

It is requested that Retailers will snpply themselves if possible through their Wholesale Houses;
but samples may be had direct from the Proprietor—

WILSON & CO., 62 PARR STREET, LIVERPOOL.

FLETCHER'S

CONCENTRATED

STRONGEST, CHEAPEST, BEST.

LIBERAL TERMS TO CHEMISTS AND DRUGGISTS.
SPECIAL TERMS TO SHIPPERS AND LARGE CONSUMERS.

AGENTS WANTED.

FLETCHER BROS. & CO.

Analytical and Manufacturing Chemists,

GRIMSBY.

WARREN'S KEFINED WOUL FA

AN EXCELLENT REMEDY FOR SKIN DISEASES.

1s. 9d. per lb. In 4-lb., 7-lb., and 14-lb. Tins—Tins free. A 1-lb. sample tin delivered free to any town in the United Kingdom on receipt of 2s.

Used constantly in Hospitals and other high-class Medical Institutions. REPORT ON WARREN'S REFINED WOOL FAT.

By L.R.C.P.London, M.R.C.S.

By L.H.C.P.London, M.R.C.S.

"Whilst experimenting on the growth of certain germs. I made use of some of Warren's Wool Fat as a medium, but found that Tinea Tonsurans (Ringworm) which I was then investigating would not propagate in it; and although I have inoculated it with several kinds of moulds and microbes I have found no result. It seems to me that this is important, as the aseptic quality of the Wool Fat renders it very suitable for external purposes in cases associated with the growth of germs. The experiments were made in a moist atmosphere at the temperature of 950 to 950 F."

Wholesale London Agents-T. MORSON & SON. 31, 33, & 124 Sonthampton Row, Rossell Square, London, W.O.

Proprietors-A. & J. WARREN,

Wholesale Druggists & Licensed Makers of Methylated Spirit & Finis 23 & 24 REDCLIFF ST., BRISTOL.

COOK'S ANTISEPTIC SOAP

(THOMSON'S PATENT).

A most carefully conducted set of experiments by eminent members of the Medical Profession has established the fact that this Soap is of the highest value in the treatment of ECZEMA, RINGWORM, SCABIES, FAVUS, and other Diseases of the Skin.

It has also been tested in a Physiological Laboratory as a germ destroyer, and proved to be more efficient than any other experimented with.—See "Journal of the Society of Chemical Industry," 1888. No. 3.

Messrs. E. COOK & CO. have received from Medical Men numerous communications testifying to the success that has attended the use of this Soap, most of which cannot be published; but Messrs. E. C. & Co. have the permission of many of the writers to show the originals to members of the Medical Profession.

CAN BE OBTAINED THROUGH

MESSRS. MAW, SON & THOMPSON, OF LONDON,

OR DIRECT FROM THE MAKERS.

Price, in 3-tablet Boxes, per doz., 12/, Selling Price, 1/6; in \(\frac{1}{4}\)-gross Boxes, 10/6 per box.

Messrs. E. COOK & CO. will, with pleasure, send sample, free of charge, to Medical Men on application.

Manufactured by EDWARD COOK & CO., LONDON, Makers of COOK'S Celebrated GOLD MEDAL PRIMROSE, MOTTLED, & SOFT SOAPS; also of COOK'S LIGHTNING CLEANSER, and COOK'S HIGH-CLASS TOILET SOAPS.

Speciality— SAVON DE LUXE.

Established-NORWICH, 1790; LONDON, 1819.



DISPENSING BOTTLES





QUININE TINTED.

"L" BRAND.

Warranted Finest Quality Metal, Good Mouths, and Correct Measure.



CATALOGUE No. 42a. In any quantity from Stock.

FLATS OR OVALS.

Size ... $1 \text{ oz. } 1\frac{1}{2}\text{ oz. } 2 \text{ oz. } 3 \text{ oz. } 4 \text{ oz. } 6 \text{ oz. } 8 \text{ oz. } 10 \text{ oz. } 12 \text{ oz. } 16 \text{ oz. } 20 \text{ oz. } 24 \text{ oz. } 32 \text{ oz. } 40 \text{ oz.}$ Per Gross 9/- 9/6 10/- 10/6 10/6 11/6 11/6 16/- 17/- 21/- 25/- 27/6 36/- 40/
Discount: 10 per cent. Monthly, 5 per cent. Half-yearly.

ALSO

IN ORIGINAL PACKAGES DIRECT FROM WORKS.

Carriage paid to Bristol, Glasgow, Liverpool, or London.

"L" BRAND. CATALOGUE No. 42a.

Size ... 1 oz. $1\frac{1}{2}$ oz. 2 oz. 3 oz. 4 oz. 6 oz. 8 oz. 10 oz. 12 oz. 16 oz. 20 oz. 24 oz. 32 oz. 40 oz. Per Gross 7/6 8/- 8/- 8/6 8/6 9/6 9/6 12/6 13/6 16/6 20/- 22/- 29/- 33/-

BEST GREEN FLINT FLATS OR OVALS.

CATALOGUE No. 42.

Size ... $\frac{1}{2}$ oz. 1 oz. $1\frac{1}{2}$ oz. 2 oz. 3 oz. 4 oz. 6 oz. 8 oz. 10 oz. 12 oz. 16 oz. 20 oz. 24 oz. 32 oz. 40 oz. Per Gross 6/- 6/- 6/- 6/- 6/8 6/8 7/9 7/9 10/6 11/6 15/- 19/- 22/- 27/6 32/- STRICTLY NET CASH.

CASKS OR CRATES EXTRA.

LYNCH & CO., ALDERSGATE LONDON, E.C.

48 QUEEN STREET, MELBOURNE.

NATURAL MINERAL WATERS.

NET CARRIAGE PAID.

INGRAM & ROYLE,

NET CARRIAGE PAID.

Packing Free.

LONDON 2 Farringdon St., E LIVERPOOL

BRISTOL Both Bridge PAID.

1 dolling 1100. 52	Farringu	on St., E.C.	Finney Lane.	Bath	Bridge.	LIWONI	ць 1100.	
NAME.	Per Dozen.	Original Packages.	NI A METE		Per Dozen.	Original	Packages.	
NAME.	Bots. 2 Bots	Bottles. ½ Bottles.	NAME.		Bots. ½ Bots.	Bottles.	½ Bottles.	
Æsculap Alet Apollinaris Birmensdorf Bonncs Bourboule (La) Bussang Carlsbad Condal Contrexeville "Le Cler" Do. "Pavilion" Elitwick Friedrichshall Glesshubler, double-size hottle: Do. (laret-shape "Hunyadi-Janos Johannis-Brunnen Kissengen Kreuznach Krondorf Krondorf Kronenguelle	15/ 12/ 6/3 5/ 12/ 12/ 14/ 14/ 14/ 14/ 14/ 14/ 14/ 14/ 15/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/ 16/ 15/	25 30/ 50 50/ 50 38/ 50 25/ 100 39/ 50 48/ 50 40/ 50 42/ 50 46/ 50 35/ 50 35/ 50 35/ 50 35/ 25 25/ 50 40/ 50 33/ 100 38/ 50 48/ 50 48/ 50 30/ 50 50/ 50 30/ 100 38/ 50 48/ 50 48/ 50 30/ 50 50/ 50 23/ 100 36/ 50 45/ 50 23/ 100 36/ 50 45/ 50 23/ 100 36/ 50 45/ 50 23/ 100 36/ 50 45/	Marienbad Missisquoi Mont Dore Oberbrunnen Orezza Pullna Roisdorf Rosbach Royat Rubinat St. Boës St. Galmier Badoit (Do. Noël (S) Salvator Schwalbach Selters Sulis Tarasp Tannus Vals (Société Springs) Victoria Ofner Widdungen	parkling)	10/ 25/ 11/ 10/ 12/ 8/ 6/ 6/ 5/ 9/ 15/ 9/ 12/ 6/ 4/ 6/ 5/ 12/ 5/6 4/6 8/6 7/6 14/ 10/	50 38/ 24 48/ 50 44/ 50 40/ 50 25/ 50 22/ 50 22/ 50 28/ 50 28/ 50 28/ 50 23/ 50 24/ 50 23/ 50 23/ 50 23/ 50 23/ 50 33/ 50 23/ 50 33/ 50 33/ 50 33/ 50 33/ 50 33/ 50 48/ 50 33/ 50 33/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 33/ 50 48/ 50 33/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 48/ 50 33/ 50 48/ 50 48/ 50 33/ 50 48/ 50 50 48/ 50 50 48/ 50 50 48/ 50 50 48/ 50 50 50 50 50 50 50 50 50 50 50 50 50 5		

Cadbury's Cocoa

IS SOLUBLE

and ABSOLUTELY PURE.

ABSOLUTELY PURE.

WRIGHT

WHOLESALE & EXPORT DRUGGISTS,

DRUG GRINDERS,

IMPORTERS AND DISTILLERS OF ESSENTIAL OILS,

MAKERS OF

Granular Effervescing Salts. Citrate Iron and Quinine. Ammonio-Citrate Iron.

PEPSIN.

EXPRESSED JUICES.

Umney's Fluid Extract Cinchona Bark, Essential Oil Almonds, Freed from Prussic Acid.

LAYMAN

Green Extracts.
Fluid Extracts.
Preparations of British
Pharmacopæia, 1885.

MANUFACTURING CHEMISTS.

PHARMACY & THERAPEUTICS.

NORWEGIAN COD-LIVER OIL,

Finest Non-Congealing (Season 1889).

SAL VOLATILE, SPIRITS NITRE, &c., of English Manufacture, in Bond. ETHER, CHLOROFORM & ALCOHOL in Bond.

PRICES CURRENT ON APPLICATION.

TELEGRAMS-"UMNEY LONDON."

SOUTHWARK, LONDON.

UMNEY